Extra Edition—Annual Market Reviews and Statistical Records—Extra Edition

Oil, Paint and Drug Reporter

The Market Authority Since 1871
Chemicals-Dyestuffs-Drugs-Paints-Oils-Fertilizers

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Oil, Paint and Drug Reporter

The Market Authority Since 1871
Chemicals-Dyestuffs-Drugs-Paints-Oils-Fertilizers

Founded October 18, 1871, by William O. Allison

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The Market Authority Since 1871
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Business Activity, Sentiment, and Purpose in 1927 as a Guide to 1928

Business in the many articles classified as chemicals, oils, and drugs, and in the multitude of products chiefly composed of one or more of them was, on the whole, voluminous during 1927. Production being particularly heavy in certain of these lines (petroleum and its products are an outstanding example) prices had a descending trend in the majority of cases; although the average declension was not so marked as that in 1926. The closer approach to stability in 1927 was, doubtless, due to reluctance to make further reductions from levels which afforded but a minimum of profit, and the reductions that were made resulted, for the most part, from necessity to dispose of production that had not been brought into proper relation with normal demand.

The Oil, Paint and Drug Reporter year-end survey of market conditions and prices, which comprises forty-eight groups of related commodities in fourteen industrial divisions of the general field of chemicals, oils, and drugs (it appears on the three following pages), shows an increase of 2.2 percent in the weight of trade opinion that there was improvement in business over the year. This is a better showing than was disclosed by the survey at the end of 1926. The index number of prices in the markets surveyed was 1.2 percent lower than that at the end of the preceding year. This, too, is a better showing than that made a year earlier, when prices had been reduced 6.5 percent over the year. Only one of the larger groups of products in the markets surveyed by the Reporter showed a higher level of prices at the end of 1927 than at the end of the preceding year. This was the group comprising oils and fats derived from animal, fish, and vegetable materials. Prices in this group were 18.7 percent higher as a result of conditions during the year. The petroleum group made the worst showing, its price level having dropped 24.3 percent over the year. Prices in the paint and varnish group, including flaxseed and linseed oil and naval stores, were 8.8 percent lower. Those in the chemical group, comprising industrial chemicals, coaltar products, dyestuffs and tanstuffs, and fertilizers, were 4.6 percent lower. Those in the group of drugs, fine chemicals, botanicals, essential oils, gums, and waxes were 1.1 percent lower. But, optimism prevailed in practically all the divisions, and the consensus of their leaders overwhelmingly advanced the belief that business would be better early and late in 1928 than it had been in 1927. The single exception with forebodings of an unfavorable reaction was found in the cottonseed group—and that had had such a good year in 1927 that the level of prices had ascended 52.4 percent!

That is the picture of the markets with which the Reporter has to do, which is to be hung against a vivid background of general prosperity in 1928, prosperity, as to the nature and substance of which there exists a most extraordinary difference of opinion. There is no doubt, there can be no doubt, that the people of the United States prospered during 1927. There can be, however, and there is doubt, because understanding is lacking, as to the nature of this prosperity; so much so that it has been rather seriously designated a "profitless prosperity." From a strictly industrial point of view, that designation is as apt as it is alliterative. The nation has prospered. Individuals have prospered. Industry has prospered. But, prosperity must always be paid for, and the bill for that enjoyed in 1927 was handed to industry. There is a rather clear reason for this, to which we shall return later.

Careful analysis of the bases of prosperity in 1927 shows that there was a measure of contraction in many lines of activity toward the end of the year. Conditions were not so good in manufacturing when the period closed as they had been when it opened. But, they had improved so much in the long upswing which began early in the year that, in most instances, their average level was, at most, but little below that for 1926. Records of power consumption indicate an increase of about 5 percent in industrial activity as a whole.

The year was not so good as the preceding one in the iron and steel industry, in agriculture, in the automotive industry, in construction. With the exception of the last, these lines began to show improvement in the closing days of the year; although employment did not increase encouragingly. It is generally believed that, in all of them, the trend during 1928 will be steadily upward; although the rise will most likely be slow. The textile, leather, and paper industries had a better year in 1927 than in 1926. In the case of the first two, the improvement was largely due to smaller supplies of raw materials. The paper industry prospered from a still further increasing demand. Production of coal and coke was lower than in the previous year. Petroleum production set a high record far in excess of that for any preceding year.

In manufacturing for more direct ultimate consumption, mass production was being gradually turned during 1927 from the simpler forms of standardized output to a stronger emphasizing of quality and the cultivation of individuality of product. Perhaps the most striking example of this was presented in the automotive industry in a decision by one manufacturer, which exercised an unbelievably broad influence, not only on that industry, but on the entire industrial community. As this tendency grows, so will the maintenance of the high degree of prosperity be assured. Through it will come a broader, a more efficient competition, differing far from that which rests on price alone, and far more potent as an influence for real progress. In far too many instances the savings which had been effected through more efficient productive processes have been dissipated in selling efforts necessitated by the fact that the product of one manufacturer had nothing which gave it preferability to that of another. Some, who have commented on this new tendency in manufacturing, seem to foresee severe competition as a consequence. But, there is no other form of competition which is so disastrous in its effect as competition in price. Quality will be standardized at a higher level as a result of the newer idea in production, and may, therefore, have little weight in a competitive sense. Competition in individuality, we believe, will prove more deserving to be called vigorous than severe.

Loadings of revenue freight, which are a reliable measure of industrial-commercial activity, were almost 27 percent less (in number of cars) in 1927 than in the preceding year. This loss was all incurred in the second half of the year, the number of cars loaded in the first six months having been greater than that in the corresponding period of 1926. Not all of the loss in carloadings was a reflection of a diminution of the volume of business; because the average capacity of railroad cars was larger, and the movement of goods by motor truck increased greatly. Nothing else has contributed as much to the growth of the practice of buying supplies in comparatively small lots as has the increased efficiency in transportation over the past few years. If

Year-End Survey of Market Conditions

Summary of Fourteen Major Market Groups

	Compared with same period a year ago		
	Better	**As Good**	**Not So Good**
Sales in last quarter of 1927	38 percent	34 percent	28 percent
Sales in whole year of 1927	55 percent	27 percent	18 percent
Collections at December 31, 1927	19 percent	65 percent	16 percent
Collections over year, 1927	17 percent	76 percent	7 percent
Outlook for business in first quarter of 1928	43 percent	48 percent	9 percent
Outlook for business during 1928	44 percent	51 percent	5 percent
General condition of business	36 percent	50 percent	14 percent

Relative condition, 102.2; relative price, 98.8.

Business Conditions and Outlook, January 1, 1928

Statistical Record Compiled from Data Obtained by the Oil, Paint and Drug Reporter In a Comprehensive Survey of All Divisions of the Major Markets in the Chemical, Dye, Oil, Paint, Drug, and Related Industries, and Presented In Percentages Based on Total Number of Firms in Each Group Which Furnished Requested Information

Industrial Chemicals

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	55%	23%	22%
Sales in whole year, 1927.....	57%	26%	17%
Collections at Dec. 31, 1927.....	9%	91%	..
Collections over year, 1927.....	9%	91%	..
Outlook for business in first quarter, 1928.....	30%	52%	18%
Outlook for business during 1928	38%	57%	5%
General condition of business..	33%	57%	10%

Relative condition, 102.3; relative price, 99.5.

Miscellaneous Chemicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	33%	17%
Sales in whole year, 1927.....	67%	17%	16%
Collections at Dec. 31, 1927.....	17%	83%	..
Collections over year, 1927.....	17%	83%	..
Outlook for business in first quarter, 1928.....	67%	17%	16%
Outlook for business during 1928	60%	20%	20%
General condition of business..	46%	42%	12%

Fertilizer Materials

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	57%	22%	21%
Sales in whole year, 1927.....	50%	29%	21%
Collections at Dec. 31, 1927.....	29%	57%	14%
Collections over year, 1927.....	29%	57%	14%
Outlook for business in first quarter, 1928.....	71%	29%	..
Outlook for business during 1928.	77%	23%	..
General condition of business..	52%	36%	12%

Relative condition, 104.0; relative price, 91.2.

Acids

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	67%	..	33%
Sales in whole year, 1927.....	100%	..	..
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	33%	67%	..
Outlook for business during 1928	33%	67%	..
General condition of business..	39%	56%	5%

Sodas, Bleach, Ammonia

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	33%	17%
Sales in whole year, 1927.....	33%	34%	33%
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	17%	66%	17%
Outlook for business during 1928	33%	67%	..
General condition of business..	22%	67%	11%

Ammoniates

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	60%	40%	..
Sales in whole year, 1927.....	40%	60%	..
Collections at Dec. 31, 1927.....	40%	60%	..
Collections over year, 1927.....	40%	60%	..
Outlook for business in first quarter, 1928.....	60%	40%	..
Outlook for business during 1928.	80%	20%	..
General condition of business..	53%	47%	..

Arsenicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	..	50%
Sales in whole year, 1927.....	40%	40%	20%
Collections at Dec. 31, 1927.....	20%	80%	..
Collections over year, 1927.....	20%	80%	..
Outlook for business in first quarter, 1928.....	..	60%	40%
Outlook for business during 1928	25%	75%	..
General condition of business..	26%	56%	18%

Textile Chemicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	67%	33%	..
Sales in whole year, 1927.....	67%	33%	..
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	33%	67%	..
Outlook for business during 1928	33%	67%	..
General condition of business..	33%	67%	..

Phosphates

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	80%	..	20%
Sales in whole year, 1927.....	60%	..	40%
Collections at Dec. 31, 1927.....	20%	60%	20%
Collections over year, 1927.....	20%	60%	20%
Outlook for business in first quarter, 1928.....	80%	20%	..
Outlook for business during 1928.	80%	20%	..
General condition of business..	57%	27%	16%

Coaltar Products

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	47%	33%	20%
Sales in whole year, 1927.....	53%	33%	14%
Collections at Dec. 31, 1927.....	7%	72%	21%
Collections over year, 1927.....	..	86%	14%
Outlook for business in first quarter, 1928.....	60%	33%	7%
Outlook for business during 1928	53%	40%	7%
General condition of business..	36%	50%	14%

Relative condition, 102.2; relative price, 97.6.

Coaltar Intermediates

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	40%	20%	40%
Sales in whole year, 1927.....	20%	60%	20%
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928	80%	..	20%
Outlook for business during 1928.	60%	20%	20%
General condition of business..	33%	50%	17%

Potashes

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	25%	25%	50%
Sales in whole year, 1927.....	50%	25%	25%
Collections at Dec. 31, 1927.....	25%	50%	25%
Collections over year, 1927.....	25%	50%	25%
Outlook for business in first quarter, 1928.....	75%	25%	..
Outlook for business during 1928.	67%	33%	..
General condition of business..	44%	35%	21%

Coaltar Crudes

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	33%	50%	17%
Sales in whole year, 1927.....	67%	33%	..
Collections at Dec. 31, 1927.....	20%	40%	40%
Collections over year, 1927.....	..	60%	40%
Outlook for business in first quarter, 1928.....	67%	33%	..
Outlook for business during 1928	67%	33%	..
General condition of business..	42%	42%	16%

Coaltar Colors

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	75%	25%	..
Sales in whole year, 1927.....	75%	..	25%
Collections at Dec. 31, 1927.....	..	75%	25%
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	25%	75%	..
Outlook for business during 1928.	25%	75%	..
General condition of business..	33%	59%	8%

Cottonseed, Cake, Meal, Oil

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	25%	25%
Sales in whole year, 1927.....	50%	50%	..
Collections at Dec. 31, 1927.....	50%	50%	..
Collections over year, 1927.....	50%	50%	..
Outlook for business in first quarter, 1928.....	..	75%	25%
Outlook for business during 1928.	..	75%	25%
General condition of business..	33%	54%	13%

Relative condition, 102.0: relative price, 152.4.

Paint and Varnish Materials

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	38%	30%	32%
Sales in whole year, 1927.....	67%	20%	13%
Collections at Dec. 31, 1927....	6%	74%	20%
Collections over year, 1927....	3%	94%	3%
Outlook for business in first quarter, 1928.....	53%	38%	9%
Outlook for business during 1928.	47%	44%	9%
General condition of business..	36%	50%	14%

Relative condition, 102.2; relative price, 96.7.

Mixed Paints

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	17%	33%	50%
Sales in whole year, 1927.....	50%	17%	33%
Collections at Dec. 31, 1927.....	..	67%	33%
Collections over year, 1927.....	17%	67%	16%
Outlook for business in first quarter, 1928.....	33%	67%	..
Outlook for business during 1928.	33%	67%	..
General condition of business..	25%	53%	22%

Gums, Waxes, Shellac

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	30%	25%	45%
Sales in whole year, 1927.....	30%	35%	35%
Collections at Dec. 31, 1927.....	5%	70%	25%
Collections over year, 1927.....	5%	75%	20%
Outlook for business in first quarter, 1928.....	40%	45%	15%
Outlook for business during 1928	45%	40%	15%
General condition of business..	26%	48%	26%

Relative condition, 100.0; relative price, 87.3.

Pigments

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	56%	11%	33%
Sales in whole year, 1927.....	78%	22%	..
Collections at Dec. 31, 1927....	..	67%	33%
Collections over year, 1927....	..	100%	..
Outlook for business in first quarter, 1928.....	38%	50%	12%
Outlook for business during 1928.	25%	75%	..
General condition of business..	33%	54%	13%

Lacquer Materials

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	..	25%	75%
Sales in whole year, 1927.....	75%	..	25%
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	75%	25%	..
Outlook for business during 1928.	75%	25%	..
General condition of business..	37%	46%	17%

Gums

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	14%	29%	57%
Sales in whole year, 1927.....	14%	29%	57%
Collections at Dec. 31, 1927.....	..	71%	29%
Collections over year, 1927.....	15%	71%	14%
Outlook for business in first quarter, 1928.....	71%	29%	..
Outlook for business during 1928.	71%	29%	..
General condition of business..	31%	43%	26%

Dry Colors

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	40%	10%
Sales in whole year, 1927.....	50%	40%	10%
Collections at Dec. 31, 1927.....	20%	60%	20%
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	50%	40%	10%
Outlook for business during 1928	40%	40%	20%
General condition of business..	35%	53%	12%

Pyroxylin Lacquers

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	33%	17%
Sales in whole year, 1927.....	83%	17%	..
Collections at Dec. 31, 1927.....	..	100%	..
Collections over year, 1927.....	..	83%	17%
Outlook for business in first quarter, 1928.....	83%	..	17%
Outlook for business during 1928.	83%	..	17%
General condition of business..	50%	39%	11%

Waxes

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	63%	12%	25%
Sales in whole year, 1927.....	50%	25%	25%
Collections at Dec. 31, 1927.....	13%	75%	12%
Collections over year, 1927.....	..	88%	12%
Outlook for business in first quarter, 1928.....	38%	50%	12%
Outlook for business during 1928.	50%	38%	12%
General condition of business..	36%	48%	16%

Shellac

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	..	40%	60%
Sales in whole year, 1927.....	20%	60%	20%
Collections at Dec. 31, 1927.....	..	60%	40%
Collections over year, 1927.....	..	60%	40%
Outlook for business in first quarter, 1928.....	..	60%	40%
Outlook for business during 1928.	..	60%	40%
General condition of business..	3%	57%	40%

Dyestuffs and Tanstuffs

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	55%	36%	9%
Sales in whole year, 1927.....	91%	9%	..
Collections at Dec. 31, 1927....	9%	73%	18%
Collections over year, 1927....	18%	73%	9%
Outlook for business in first quarter, 1928.....	10%	90%	..
Outlook for business during 1928.	30%	70%	..
General condition of business..	35%	59%	6%

Relative condition, 102.9; relative price, 93.2.

Petroleum and Products

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	17%	33%
Sales in whole year, 1927.....	50%	33%	17%
Collections at Dec. 31, 1927....	33%	34%	33%
Collections over year, 1927....	33%	50%	17%
Outlook for business in first quarter, 1928.....	50%	33%	17%
Outlook for business during 1928.	64%	36%	..
General condition of business..	47%	34%	19%

Relative condition, 102.8; relative price, 75.7.

Naval Stores

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	..	100%	..
Sales in whole year, 1927.....	100%	..	..
Collections at Dec. 31, 1927.....	50%	50%	..
Collections over year, 1927.....	50%	50%	..
Outlook for business in first quarter 1928.....	50%	50%	..
Outlook for business during 1928.	50%	50%	..
General condition of business..	50%	50%	..

Relative condition, 105.0; relative price, 77.3.

Dyestuffs and Sizes

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	29%	57%	14%
Sales in whole year, 1927.....	86%	14%	..
Collections at Dec. 31, 1927....	..	71%	29%
Collections over year, 1927....	14%	72%	14%
Outlook for business in first quarter, 1928.....	14%	86%	..
Outlook for business during 1928	29%	71%	..
General condition of business..	29%	62%	9%

Crude Petroleum

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	25%	25%
Sales in whole year, 1927.....	50%	25%	25%
Collections at Dec. 31, 1927....	25%	25%	50%
Collections over year, 1927....	25%	25%	50%
Outlook for business in first quarter, 1928.....	75%	25%	..
Outlook for business during 1928.	100%	..	..
General condition of business..	54%	21%	25%

Flaxseed and Linseed Oil

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	45%	33%	22%
Sales in whole year, 1927.....	67%	22%	11%
Collections at Dec. 31, 1927....	22%	56%	22%
Collections over year, 1927....	11%	78%	11%
Outlook for business in first quarter, 1928.....	56%	33%	11%
Outlook for business during 1928.	56%	33%	11%
General condition of business..	43%	42%	15%

Relative condition, 102.8; relative price, 99.5.

Tanning Materials

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	100%	..	..
Sales in whole year, 1927.....	100%	..	..
Collections at Dec. 31, 1927....	25%	75%	..
Collections over year, 1927....	25%	75%	..
Outlook for business in first quarter, 1928.....	..	100%	..
Outlook for business during 1928.	33%	67%	..
General condition of business..	47%	53%	..

Refinery Products

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	12%	38%
Sales in whole year, 1927.....	50%	38%	12%
Collections at Dec. 31, 1927....	37%	38%	25%
Collections over year, 1927....	38%	62%	..
Outlook for business in first quarter, 1928.....	37%	38%	25%
Outlook for business during 1928.	40%	60%	..
General condition of business..	42%	41%	17%

Drugs and Fine Chemicals

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	31%	28%	41%
Sales in whole year, 1927.....	38%	24%	38%
Collections at Dec. 31, 1927....	7%	79%	14%
Collections over year, 1927....	10%	86%	4%
Outlook for business in first quarter, 1928.....	48%	45%	7%
Outlook for business during 1928.	38%	59%	3%
General condition of business..	29%	53%	18%

Relative condition, 101.1; relative price, 109.0.

Alcohols

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	60%	..	40%
Sales in whole year, 1927.....	20%	..	80%
Collections at Dec. 31, 1927....	20%	80%	..
Collections over year, 1927....	20%	80%	..
Outlook for business in first quarter, 1928.....	60%	40%	..
Outlook for business during 1928.	40%	40%	20%
General condition of business..	37%	40%	23%

Alkaloids

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	40%	20%	40%
Sales in whole year, 1927.....	60%	20%	20%
Collections at Dec. 31, 1927....	..	60%	40%
Collections over year, 1927....	..	100%	..
Outlook for business in first quarter, 1928.....	40%	60%	..
Outlook for business during 1928.	40%	60%	..
General condition of business..	30%	53%	17%

Pharmaceutical Chemicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	20%	40%	40%
Sales in whole year, 1927.....	50%	20%	30%
Collections at Dec. 31, 1927.....	10%	90%	..
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	50%	40%	10%
Outlook for business during 1928.	30%	70%	..
General condition of business..	27%	60%	13%

Wood Chemicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	22%	33%	45%
Sales in whole year, 1927.....	22%	45%	33%
Collections at Dec. 31, 1927.....	..	78%	22%
Collections over year, 1927.....	22%	67%	11%
Outlook for business in first quarter, 1928.....	44%	45%	11%
Outlook for business during 1928.	44%	56%	..
General condition of business..	26%	54%	20%

Botanical Drugs

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	22%	33%	45%
Sales in whole year, 1927.....	33%	45%	22%
Collections at Dec. 31, 1927....	11%	67%	22%
Collections over year, 1927....	11%	89%	..
Outlook for business in first quarter, 1928.....	63%	37%	..
Outlook for business during 1928.	50%	50%	..
General condition of business..	32%	53%	15%

Relative condition, 101.7; relative price, 102.9.

Domestic Botanicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	..	33%	67%
Sales in whole year, 1927.....	..	100%	..
Collections at Dec. 31, 1927....	..	67%	33%
Collections over year, 1927....	..	100%	..
Outlook for business in first quarter, 1928.....	67%	33%	..
Outlook for business during 1928.	67%	33%	..
General condition of business..	22%	61%	17%

Imported Botanicals

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	33%	34%	33%
Sales in whole year, 1927.....	50%	17%	33%
Collections at Dec. 31, 1927....	17%	67%	16%
Collections over year, 1927....	17%	83%	..
Outlook for business in first quarter, 1928.....	60%	40%	..
Outlook for business during 1928.	40%	60%	..
General condition of business..	36%	50%	14%

Essential Oils

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	25%	25%	50%
Sales in whole year, 1927.....	33%	34%	33%
Collections at Dec. 31, 1927.....	8%	67%	25%
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	50%	42%	8%
Outlook for business during 1928.	40%	60%	..
General condition of business..	26%	55%	19%

Relative condition, 100.7; relative price, 96.5.

Domestic Essential Oils

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	33%	17%	50%
Sales in whole year, 1927.....	50%	17%	33%
Collections at Dec. 31, 1927.....	17%	50%	33%
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	67%	33%	..
Outlook for business during 1928.	33%	67%	..
General condition of business..	33%	48%	19%

Imported Essential Oils

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	17%	33%	50%
Sales in whole year, 1927.....	17%	50%	33%
Collections at Dec. 31,. 1927.....	..	83%	17%
Collections over year, 1927.....	..	100%	..
Outlook for business in first quarter, 1928.....	33%	50%	17%
Outlook for business during 1928.	50%	50%	..
General condition of business..	20%	61%	19%

Miscellaneous Oils and Fats

All Branches of the Trade

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	31%	44%	25%
Sales in whole year, 1927.....	50%	19%	31%
Collections at Dec. 31, 1927....	19%	69%	12%
Collections over year, 1927....	13%	87%	..
Outlook for business in first quarter, 1928.....	25%	69%	6%
Outlook for business during 1928.	27%	73%	..
General condition of business..	28%	60%	12%

Relative condition, 101.6; relative price, 104.2.

Fish Oils

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	17%	33%	50%
Sales in whole year, 1927.....	33%	17%	50%
Collections at Dec. 31, 1927....	17%	83%	..
Collections over year, 1927....	..	100%	..
Outlook for business in first quarter, 1928.....	33%	67%	..
Outlook for business during 1928.	33%	67%	..
General condition of business..	22%	61%	17%

Animal Oils and Fats

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	33%	50%	17%
Sales in whole year, 1927.....	83%	..	17%
Collections at Dec. 31, 1927....	17%	50%	33%
Collections over year, 1927....	17%	83%	..
Outlook for business in first quarter, 1928.....	17%	83%	..
Outlook for business during 1928.	17%	83%	..
General condition of business..	31%	58%	11%

Vegetable Oils

	Compared with same period a year ago.		
	Better.	As good.	Not so good.
Sales in last quarter, 1927.....	50%	50%	..
Sales in whole year, 1927.....	25%	50%	25%
Collections at Dec. 31, 1927....	25%	75%	..
Collections over year, 1927....	25%	75%	..
Outlook for business in first quarter, 1928.....	25%	50%	25%
Outlook for business during 1928.	33%	67%	..
General condition of business..	31%	61%	8%

Trade Leaders Discuss Business Conditions

Executives of National Organizations in the Chemical, Dyestuffs, Oil, Paint, Drug, Fertilizer, and Related Industries Give Their Opinions for the Information of Readers of the Reporter

H. F. Moore

(University of Illinois, Urbana)

President, American Society for Testing Materials

During 1927, as during other recent years, the American Society for Testing Materials has given a considerable proportion of its attention to the study of properties and methods of testing of paints and oils.

In general the progress achieved in this field consists mainly in the correlation of the basic phenomena observed by the physicist and the chemist with the everyday problems of the users of paints and oils.

Nineteen hundred twenty-eight promises to show still further progress along the line of correlation of the work of the physicist and the chemist with the needs of the daily user, and it is hoped that the end of the year will see appreciable development looking toward practical specifications and methods of testing for paints and oils, based on sound physical and chemical principles.

C. L. Mantell

(Pratt Institute, Brooklyn)

Chairman, New York Section, American Electrochemical Society

An electrochemist's review of the year 1927 must necessarily be a hybrid one, as the electrochemist's activities constantly carry him into the fields that the physicist, the metallurgist, and the electrical engineer, rightly or wrongly, regard as their own.

Continued progress in fundamental research has featured the year. Addition agents in metal refining have been studied from new angles; the growing use of goulac and its replacement of glue is one of the results. One copper refiner stated that every pound of glue used cost over $500 as the result of the slightly increased voltages necessary when glue was used as an addition agent. Goulac is reducing this cost item.

The commercial development of refined and pure aluminum has continued. The year has seen further development and operation of new Canadian aluminum plants, employing all the lessons learned from American, Norwegian, and continental practice. Carbon electrode plants are now producing larger and larger electrodes of improved quality as to resistance, method of joining, and operating characteristics. This has been due to the demand from electric furnace operators who call for bigger and higher powered units.

The electrometallurgy of nickel and zinc has continued to advance both practically and theoretically. Sulphur-free electrolytic nickel continues to find new uses. In contrast, the theoretical and development phases of electrolytic iron have outstripped its commercial development which had little if any advance during the year.

It is perhaps in electroplating that we find the developments given the greatest publicity. Chromium plating has advanced by leaps and bounds, perhaps its greatest progress being due to its utilization more and more by the automotive manfacturer. Nickel plating may have suffered in bulk from the apparent inroads; although the year has seen expansion of nickel plating on aluminum, particularly on aluminum trays and hotelware. The platers and manufacturers have co-operated to support a research associate at the Bureau of Standards to aid them in their problems. Cadmium plating has continued its progress, almost daily finding new applications in the war against corrosion.

In the electrolytic industries at times caustic and chlorine manufacturers found that they did not as usual have an excess of chlorine to dispose of, but had the formerly unusual condition of having an excess of caustic for the market.

A number of phosphoric acid and phosphate makers have been troubled with chromium-bearing raw materials and its resulting coloring of their product. It is very likely that their present investigations into electrothermal methods of production may cause some of them to abandon their chemical processes or employ the electric furnace in conjunction with them.

Berylium and magnesium have continued their theoretical, practical and commercial progress, entirely due to the American producers.

The application of electrochemical principles to corrosion control by the use of impressed voltages on apparatus has expanded; the publicity for hydrogen ion measurement and its application in industry; the continuous analysis of glue; waste and process gases by electrical means dependent upon the varying resistivity of gas due to differing percentages of its constituents; the restoration of antiques by electrochemical means, sometimes termed "reversed electrolysis"; the gaseous reduction of ores and oxides; have all been given considerable study and have shown great strides in commercial development and application.

Zirconium-silicon alloys for steel manufacture made in the electric furnace, and increased interest in the electric furnace for the production of phosphorus, phosphoric acid, carbon bisulphide, and pure alumina have been notable during the year.

August Merz

(Heller & Merz Company, Newark, N. J.)

President, Synthetic Organic Chemical Manufacturers' Association

The condition of business in the synthetic organic chemical industry at the close of the year appears to be on a much better basis than it was a year ago.

Cut-throat and ruinous competition brings about conditions quite as unsatisfactory to the purchaser as to the seller. The purchaser realizes that, in a stabilized market, speculative buying is almost entirely eliminated.

It is to be hoped that some day producers will realize that the net profit resulting from a reasonable margin on all their products is much to be preferred to the same net resulting from an averaging of losses on some products and gains on others.

As in the previous year, great progress has been made in the synthetic organic chemical industry. The development of new products causes greater consumption of heavy chemicals, thus benefiting that industry. New industries, heretofore the merest of visions, become realities of the greatest importance through the commercial development of both old and new products.

The financier no longer regards the chemist as an idle dreamer. The American financier should not forget that thriving domestic industries are as necessary to the success of his business of finance as is a healthy financial condition to the success of the business of industry.

Andre Siegfried, the French economist, points to the fallacy of American industrial investments in countries that are already our competitors. Our surplus funds should be invested where they will serve to develop both sources of our necessary raw materials, and markets for our finished products.

Several decades ago the investment of European funds for the development of American railroads was entirely logical. By this development, Europe obtained foodstuffs and raw materials, and at the same time, a market for her finished products.

The prospects for next year appear to be good unless tariff revision becomes the football of our politicians.

President Edgerton of the National Association of Manufacturers recently stated that business could far better weather a calamity than uncertainty. If tariff revision becomes the subject of congressional attention in 1928, the prospects of good business will rapidly vanish.

Ernest T. Trigg

(John Lucas & Co., Inc., Philadelphia)

President, Agricultural Insecticide and Fungicide Manufacturers' Association

I believe the prospects for 1928 business are conservatively encouraging. I see nothing in the situation to justify undue expectations. I believe that any sound, substantial business will make good progress during the year if it is sufficiently aggressive and intelligently conducted. I am convinced that only those manufacturers will continue to succeed and make progress, who give to the public quality merchandise.

I am also convinced that manufacturers who distribute their products through jobbers and dealers must render a high order of service and co-operation to their jobbers and dealers, if they expect them to be successful in meeting competitive conditions, which have back of them a mass buying power of some form or other. The problem of distribution in my opinion is the most important one facing manufacturers whose products go to the public generally. There is room for improvement and there is room for the elimination of much waste effort. This problem will occupy a prominent place in the consideration of all successful manufacturers and distributors during 1928.

John C. Minor

(Consulting Engineer, New York)

President, Compressed Gas Manufacturers' Association

The Compressed Gas Manufacturers' Association is not a trade association in the strict sense of the word in that its efforts are confined to the problems of the compressed gas industries that particularly apply to the technology of non-restrictive legislation, the establishment of uniform engineering standards, safe practices, and other problems that are non-commercial, and all equally valuable to gas manufacturers regardless of the specific nature of their product.

It is an established fact, however, that there is a very direct and distinct connection between the engineering progress of an industry and its stability and usefulness in the commercial world. From this point of view alone, I feel confident in saying that the end of 1927 has marked the close of a year of distinct progress to the entire industry. During this period there has been gradual increase in the construction progress of a number of concerns that compose these industries. This is all the more encouraging because definite and reasonable construction plans indicate that proportionate increases in production are anticipated and without a doubt the manufacturers entering upon such courses do so with a clear vision of the possibilities of increased volume of business.

It is not necessary that I name here any of the reasons for such a trend within the gas industry, even though there seems to be good reason to believe that each manufacturer is confronted with more or less similar marketing problems, despite the variant natures of the gases they are marketing. The general tendency toward so-called production work would indicate that the coming year held promise for even greater consumption than the past, and inasmuch as a steady and reasonable increase is practically assured, the industries have made their plans to meet the situation in the same steady and reasonable manner.

The problem of major importance to the entire industry is the development of suitable governmental regulations concerning the handling, transportation, and testing of containers. Such regulations have been in force for a long time, but in order to maintain the strictest economy in the industry it is necessary that periodic revision be made in the light of more recent information, with the object of simplifying, clarifying, and making more certain the factors that affect the safety of the industry. In this connection, representatives of the association have spent an enormous amount of time and energy, not to mention the monetary expense, during the past year, and with the able assistance of the Bureau of Explosives have prepared a document to be presented to the proper legislative authorities at an early date. Some of this work will extend well into the year 1928, but it is so far-reaching in its extent and is of such importance to the industry that abso-

Hoover Praises Chemical Co-operation

DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON

January 18, 1928.

Mr. H. J. Schnell,
Oil, Paint & Drug Reporter,
12 Gold Street,
New York, N. Y.

Dear Mr. Schnell:

In reply to your inquiry I am delighted to express the great feeling of appreciation which I have for the Chemical Advisory Committee to the Department of Commerce. The committee representing the chemical industry is outstanding both in its make-up and in the character of constructive work which it has carried on in conjunction with the Department during the past three years.

The Committee has originated two unique and extremely successful means for bringing to the attention of American business men the services and facilities of the Department. I refer to the bulletin, "Services Available to the Chemical Industry Through The United States Department of Commerce" prepared at the instance of the Committee on the occasion of the recent Exposition of Chemical Industries. The second instance to which I refer is the Conference of Chemical Executives which is quite universally proclaimed to be a most constructive undertaking.

The two examples cited above are instances of the helpful and efficient way in which the Committee has brought the Department to the industry. In turn the Committee has brought the industry to the Department in a manner that has been most helpful to us. I refer to the periodic meetings of the Advisory Committee at which times the Department is accorded a cross section of the progress and problems of the industry.

Yours faithfully,

Herbert Hoover

Secretary of Commerce.

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lute accuracy and precision must take precedence over date of conclusion.

Judging the conditions in the various compressed gas industries, therefore, from the engineering point of view, I feel safe in summarizing the conditions for 1927 as generally favorable and those anticipated for the coming year full of promise, consistent with a steady and reasonable increase in the allied industries.

H. W. Hamilton

(White Tar Company of New Jersey, Inc., Kearney, N. J.)

President, Insecticide and Disinfectant Manufacturers' Association

The year just passed has been one of keen competition and the general feeling is that 1928 will continue under the same conditions.

The annual meeting of the Insecticide and Disinfectant Manufacturers' Association was held in New York in December with a larger attendance and greater enthusiasm for the future of the industry than was ever before shown.

It was the opinion of all present at the convention that the future would see increased sales and superior products, with a healthy general prosperity throughout. Manufacturers are realizing the benefits to be derived from greater co-operation in educating the public regarding the correct uses and merits of their products. Some means will be found to gain the confidence of the household and general users of insecticides and disinfectants.

Oswald Schreiner

(United States Department of Agriculture, Washington)

President, Association of Official Agricultural Chemists

The Association of Official Agricultural Chemists has labored unceasingly for over forty years to establish the best methods of control and analysis of fertilizers, foods, feeds, drugs, etc., and through its many committees is continuing to serve the public in the chemical supervision of its nutrition and its health and in the chemicals needed in its food production program, such as fertilizers, insecticides, fungicides, and the like. Among the new features of the year is the appointment of a new committee for the chemical examination of paints, varnishes, lacquers, etc. The fertilizer committee, following the recommendation of the fertilizer conference held in Louisville, Ky., September 29 and 30, 1927, adopted the name of "Superphosphate" to displace the old general term of "Acid phosphate," designating this fertilizer product for the present as "Superphosphate (acid phosphate)", which latter term is to be dropped as soon as practicable. This removes a great deal of confusion in the trade and also much misunderstanding as to the acid character of the phosphate, which in the minds of many consumers has led to the erroneous belief that it can produce soil acidity, when in reality the opposite is more often the case.

The chemical fertilizer situation is much improved from last year, and the agricultural outlook on the whole is sufficiently promising, so that 1928 ought to be a good year for the chemical trade. There has been an increasing tendency toward the use of higher analysis fertilizers, and the introduction of new materials resulting from the fixation of atmospheric nitrogen and more concentrated phosphate salts has led to the introduction of some very concentrated fertilizers, two, three, and even four times the ordinary strengths. The fixation of nitrogen from the air into fertilizer salts has brought about a new movement in the fertilizer trade and in the import and export business in sodium nitrate, ammonium sulphate, and similar products, so that a number of new trade problems will require adjustment in the near future. The increase in production of such new products from nitrogen fixation does not necessarily affect the lines of production or of commerce in these commodities, because the increased consumption of these on soils and crops not previously fertilized more than keeps the balance.

The association, working in the interest of accurate methods for chemical analysis, aids both the chemical industry and the consumer, giving to one the methods essential to the production of reliable commercial products and to the other the protection of State and Federal authorities in enforcing the control measures in the public interest.

James B. Keister

(National Lead Company, San Francisco)

President, National Paint, Oil and Varnish Association

It is always difficult to discuss the immediate past interestingly, because events and experiences are so nearby and fresh in the public mind that they are not news; in fact, can only be of value or interest in so far as they may be used as a lesson or guide for the future.

From such information as I have been able to gather, the paint industry enjoyed a fairly satisfactory year in 1927, but a little below the tonnage and gallonage enjoyed in 1926. The comparison in net profits, however, is not so favorable, due, I think, largely to a frantic effort upon the part of nearly everyone to hold the sales volume at former high levels, in too many instances accomplishing that end by cutting profits to the disappearing point—in some instances coming to my notice, to a point showing actual loss. If the foregoing be true, then the experience of 1927 should be of value to us in 1928 both as a warning and guide.

Discussing prospects for the new year, I think it is safe to assume that residential building activities will continue to show a slight recession. On the other hand, this, I feel, will be somewhat offset by the ambitious building programs of certain corporations and public utilities now under way or in prospect, which promise a large consumption of the products of our industry.

Another promising condition is that dealers' stock are now at an irreducible minimum, so that consumer purchases must be replaced immediately, a condition not existing during the past year, when excess stocks were being disposed of. Without doubt, the reduction of merchandise stocks and the more careful exercise of credit extension has placed dealers and distributors generally on a safer and sounder financial basis. This should be reflected in more favorable balance sheets for the year.

May I say in closing that the business cake for 1927 was of such a size that the share of many of us was reduced to a very thin slice? The cure for this is to make the cake much larger this year, that our individual slice may be larger and less diaphanous. This can be done in large measure by more liberal and enthusiastic financial support of our association's two great business expansion agencies, Save the Surface and the National Clean-up and Paint-up campaigns. Its size can be materially increased also by the cultivation of a deeper and clearer sense of a common interest to be served and a willingness to be content with a fair share of the whole.

Frank L. Sulzberger

(Enterprise Paint Manufacturing Company, Chicago)

President, American Paint and Varnish Manufacturers' Association

I am rather conscious of the fact that, at the first of each year, you see published press opinions of various people as to the prospects for business for the succeeding twelve months, and that almost without exception these prophecies are for a continuation of good business or for even better results.

For that reason I rather hesitate to express my own views simply because they fall into the class of the usual New Year announcement and may as such be considered to be merely a matter of form. However, we do look for an improved business in 1928 over what we had in 1927, and we are basing our expectations on data which we have compiled for the benefit of our own company.

First and, I think, foremost, industry generally seems to be speeding up again, particularly the railroad and automotive fields are on a very much improved basis, and it looks as though the industrial consumption of materials should be better during 1928 than it was in 1927.

Then there is the very marked improvement in the attitude toward business and general conditions which we find in the Middlewestern farming section. Practically for the first time since the decline of 1920, all the dealers in this Middlewestern section, as a group, are optimistic and forward-looking on their prospects. The increase in grain values and the gradual reduction of farm debts have given the dealers a conviction that 1928 is to be a real business year for them.

There was much outside painting postponed last Spring by an unusually wet cold Spring season and the carry-over of work which painters have in prospect is certainly a most encouraging basis on which to start the New Year.

New building seems to have struck what might be called its normal. There may be slight recessions in certain places, but those best informed seem to think generally that new building will be able to maintain about its present rate in a regular, orderly way without creating over-production.

Lastly, the unpainted surface of the United States remains still the great undeveloped market of our industry. The 75 percent of the surface which was in need of repainting is still in need of repainting and we, as an industry, are making but slow progress in the conquering of this market. To the extent that the Save the Surface and the Clean-Up and Paint-Up campaigns or the individual effort of every manufacturer jar this section of our public away from its indifference to proper painting upkeep, to that extent will our sales increase and our industry prosper.

E. J. Cole

(Hilo Varnish Company, Brooklyn)

President, Federation of Paint and Varnish Production Clubs

During 1927 our industry has had its share of prosperity with the largest rewards going to those who mixed the brains and hard work into their product and its distribution. Our production men realize their opportunities and responsibilities as never before.

Almost without exception, the statistical experts promise 1928 will be a year of opportunity and profit as well as one of keen competition.

All departments must co-operate to produce and sell at right prices. The paint and varnish plant superintendent and his associates can be counted on to do their part in making the year a successful one.

Harry W. Constant

(United Sash & Door Company, Wichita, Kans.)

President, National Association of Paint Distributors

General conditions throughout the United States have shown considerable improvement in the last twelve months, and there is manifest at this time more optimism than at the same period last year. It is natural for the paint distributor to be optimistic, and it is to be hoped that 1928 will see the paint distributor effect a comeback.

The second annual report of the Harvard Research Bureau of Cost Accounting covering the paint distributors' cost of doing business in 1926 will be analyzed and discussed at the annual convention of the National Association of Paint Distributors that will be held at the Commodore Hotel, New York, February 21 and 22. The cost of conducting a wholesale paint business is information that is not only of vital interest and value to the distributors themselves, but it is also of value to manufacturers who conduct branch warehouses, or a wholesale business in connection with the chain retail store.

The information contained in the Harvard report No. 66 will be available to any one interested in this subject immediately following the annual convention. The interest that is manifest will no doubt result in the largest attendance at the February convention in the history of the association.

C. F. Speh

(Jacksonville, Fla.)

Secretary-Manager, Pine Institute of America

For an industry as old as the naval stores industry and one which has done practically nothing to improve its general conditions by studying itself seriously to take up within a few years the work of chemical research and national advertising, is a decidedly forward step.

The twelve hundred operators, large and small, with operations extending from North Carolina to Texas, are at last appreciating that the problems are common to each and that each must assist in the solving of those problems. There is also a keen realization of the need of improving methods of production, closer utilization, in the proper manner, of existing timber, establishing a fixed program toward the provision of future timber supply, and finally, the development of new and wider markets for production.

Nineteen hundred and twenty-seven has seen the continuation and a still firmer establishment of chemical research work at the Mellon Institute; the starting of monthly chemical abtracts, of all the articles appearing in American and foreign publications of terpene and resin chemistry, also on uses. It has witnessed many meetings of the producers in many sections, who were intensely interested in having presented to them the work which is being done, and to have brought home to them the realization that their industry is a true industry, capable of scientific management and control. The year has seen the presentation by the Bureau of Chemistry of a steam still which is practical and can be adapted to the use of the small operator. It has seen decided improvement in the character of the packages and through this effort a bringing about of a more friendly feeling between the consumer and the producer.

The year has also seen nearly the largest crop of naval stores ever produced and at a time when many years ago it was prophesied that the industry would be practically out of existence. It has also seen prices almost as low as the lowest prices ever witnessed. Both of these conditions, the surplus of production and low prices, are probably responsible for the realization of the need of intelligent study of the products.

The program for the new year is the expansion of our research work, the inauguration of a national advertising campaign, experiments on the improved methods of woods operations and continuation of work to improve the packages. It is expected that, with the continued rapid acceptance of the need of such work by all branches of the industry and timber owner, this program can be carried out in full.

Irving Post

(Savannah, Ga.)

Vice-president-General Manager, Naval Stores Export Corporation

To start 1927 off we had a larger stock of turpentine than the year before, and a somewhat smaller stock of rosin; but, due to favorable weather, producers were able to chip during the Winter, and we received an unusually large Spring production. In fact, this weather condition continued favorable all during the season, and, as a result, in 1927 a very large production was made, which exceeded the consuming demand. We have, therefore, had low prices on both rosin and turpentine. These low prices have increased consumption on turpentine not quite sufficient to take up the increased production; on rosin at present the indications are that the production for 1927 has practically been consumed.

We go into 1928 with a somewhat larger stock of turpentine than we had a year ago, but of rosin the stocks are practically the same. The outlook for 1928 will depend largely on weather conditions. Low prices have discouraged Winter chipping, as well as the installation of new places, and with favorable weather conditions a large crop will be made next season. However, should we have a cold, wet Spring, or a rainy Summer, this will cut the production considerably. Turpentine and rosin is a weather crop and just as difficult to predict as long range weather forecasting appears to be.

S. H. Gillespie

(Rogers-Pyatt Shellac Company, New York)

President, United States Shellac Importers' Association

At the beginning of 1927, the shellac market was in the neighborhood of 41 cents a pound. During January, February, and March it eased off to around 33 cents a pound. During April it moved up slightly, and then when news of the short Bysacki crop was more or less confirmed, prices moved up rapidly in May and still further in June and July to a high point in the middle of July of about 57 cents a pound.

It would appear that the advance had been overdone and the effect of the short crop was somewhat premature. Prices eased off gradually during the latter part of July, August and September and reached 41 cents the end of September—about the price at the beginning of the year. Following this, the real shortage of shellac in the world markets began to be felt and prices steadily rose during October, November, up to the middle of December to 52 cents, and closed about this figure at the end of the year.

Not for several years has the market shown so many changes and such wide fluctuations as during the year 1927, and it would appear that reports on crop conditions in India had more influence on the market than most any other factor. It may be true that, in certain lines, the consumption of shellac was not as large in 1927 as it was in 1926. On the other hand, there were several lines where the consumption was heavier than in the previous year, and I refer particularly to the talking machine record manufacturers.

The total shipments of orange, button, garnet and seedlac to the United States in 1927 were 155,191 packages, as compared with 245,333 in 1926, a falling off of 90,000 packages, and it has been assumed by many that this indicated a falling off in consumption. It is my personal view that the consumer has never before bought his requirements of shellac on a more hand-to-mouth basis than he did in 1927, and that stocks in the hands of dealers, importers, and consumers at the end of 1927 were the lowest they have been for years.

It is interesting to note that the total shipments to the United Kingdom of orange, button, garnet, and seedlac during 1927 were 83,132 packages, as compared with 68,278 in 1926. In other words, the shipments were 15,000 packages larger. A large portion of this increase was shipped from the United Kingdom to America in the late Summer and Fall to help replace the short shipments direct from Calcutta to the United States. The London stocks at

the close of the year were approximately 14,214 packages, which compares with 14,009 at the beginning of the year. The continent of Europe took 55,000 packages from India direct during 1927, as compared with 48,000 the year previous. This would indicate a better consuming demand there.

Turning to the outlook for 1928 in shellac, I would say that the trend of the market will depend largely on the next Bysacki. Beginning in April, this crop is gathered, but the first shellac from this crop does not reach the consuming markets until along in June. If this crop is a normal one, we may see slighly lower prices than prevail at the present time, largely due to the fact that the crop, if normal, is going to be considerably larger than last year's crop and the tendency will be to discount this.

On the other hand, if it is true that the world markets are more or less bare of shellac, and certainly what stocks there are will be lower before the Bysacki crop comes in, the demand from consumers for their actual requirements might keep the market very steady, and it is easily conceivable it may advance during the next few months. No one can tell what the price movements will be in the Summer and Fall, but, in my opinion, consumption will have a larger effect on the market during that period than any other factor.

Reverting once more to the coming Bysacki crop, it is too early to predict the size of this crop, because of at least two important conditions which are unknown at this time, namely, the extent of propaganda and the climatic conditions over the coming three or four weeks, such as rains, temperature, etc., which can affect the crop one way or the other to a very large extent.

It is my conviction that the consumer of shellac should buy at least three months in advance of his actual requirements and secure an average price for the year, which, in my opinion, will be far safer than to try and guess the shellac market which history has shown is a big speculation.

William H. Zinsser

(William Zinsser & Co., Inc., New York.)

President, American Bleached Shellac Manufacturers' Association

As I look back upon my last year's forecast for the bleached shellac industry for 1927, it is pleasing to note that my prediction of at least as great an output of bleached shellac as in the year before was more than fulfilled.

I can but repeat that this evidence of shellac's continued popularity as a quick-drying finish is even more gratifying than last year, because, in the first place, shellac all through 1927 sold on a considerably higher average than in 1926, with no resulting inroads of shellac substitutes. In the second place, the furniture industry, one of the mainstays of the shellac trade, was admittedly away below normal in 1927, throughout all the furniture sections of the United States.

Now as to 1928?

Given but a normal year, with intelligent management and above all, constructive competition, prospects for the coming year augur well. It is encouraging to see the unanimity of opinion for a better business year in 1928 as reflected in the special financial reviews and forecasts recently issued by all the New York press. From official sources, taking Secretary Mellon's statements as an example, and from prominent men in every trade, there seems nothing on the horizon to halt the upward swing of business.

The one note of caution that must be carefully sounded in order not to sour the harmony of the 1928 concert of opinion on good business is intelligent competition as opposed to the destructive kind.

Statistical charts in all lines point to greater production with lower selling prices in 1927, as though the consumer was benefiting through production savings and greater economies due to increased sales. If trades were frank with one another, I believe that they would all admit that these lower prices last year were all dictated, rather by ignorant competition and by the desire for volume without regard to overhead, than whether such reduced costs were actually warranted or not.

With the revival of the furniture trade, which at this writing is holding its annual shows in Grand Rapids, High Point, Chicago, New York, and other centers, with better business universally predicted, with a possibility of a lower average price for shellac in 1928 than in 1927, even though the market for the early months looks strong it does seem as though we could be optimistic on the bleached shellac output for 1928. We must rely upon our trade, at least, to see to it that cut-throat competition is not murder, but suicide.

Last year has often been dubbed the year of "profitless prosperity." It undoubtedly was for every concern that did not figure its costs on the basis of profit to themselves, but were stampeded into imitating the other fellow's price or even going him one better.

H. P. Trevithick

(Bureau of Chemistry, New York Produce Exchange, New York.)

President, American Oil Chemists Society

The American Oil Chemists' Society this past year has employed a research associate, Miss Geraldine K. Walker, at the Bureau of Standards, Washington, for research work on the uniformity of the Lovibond glasses in use in this country, and particularly those in use among the vegetable oil trade.

During the past several years, the color division of the Bureau of Standards, under the leadership of I. G. Priest, chief, and with the active cooperation of the American Oil Chemists' Society, together with other financial aid, has developed accurate standards for these Lovibond glasses. They, however, are not able, at present, because of their limited personnel, to standardize the glasses actually in use, but we are hoping that the present appropriation bill will increase the amount available for this division, in order that the Bureau of Standards can take up this work just as at present they standardize scientific apparatus and chemicals.

In order to save time, since any appropriation bill would not be available before July 1 of this year, the American Oil Chemists' Society, as stated before, has employed Miss Walker, and in this research work she will standardize all Lovibond glasses submitted to her through A. W. Putland, of the Portsmouth Cotton Oil Refining Corporation, Portsmouth, Va., chairman of the committee in charge of this work.

The fee for this work is $1.50 a glass. This work we consider to be of the utmost importance, not only to the cotton oil interests, but also to all the other vegetable oil manufacturers, as well as of animal fats, as these Lovibond glasses are used throughout all of these industries.

In addition to the above work, the society has numerous committees working on the analysis of detergents, soaps, vegetable oils, etc., and hopes to have full reports from all these committees by the time of the annual meeting of the society in May. We also are revising all the methods, and expect to have them ready for publication at the annual meeting.

John B. Gordon

(Washington)

Secretary, Bureau of Raw Materials for American Vegetable Oils and Fats Industries

The opening of the legislative year of 1928 at Washington finds certain laws proposed of material interest to the vegetable oil industries and certain activities under way of material interest.

One new piece of legislation is the bill, H. R. 338, recently introduced by Representative Sutherland of Alaska, and proposes that it shall be unlawful for any person, company, or corporation wantonly to waste or destroy salmon or other food fishes taken or caught in any of the waters of Alaska; nor shall any portion of food fishes except the offal, be manufactured into or used for oil or fertilizer.

The first portion of this bill is of no importance to the oils and fats industries, but the latter portion, which proposes to prohibit the use of food fish for oil or fertilizer, is of evident importance, as it is designed to exterminate the herring oil industry of Alaska. In view of the fact that some 22,000,000 pounds of herring oil are produced by the Alaska reduction plants annually and shipped to the United States for use by the oils and fats industries, such legislation as that proposed in Representative Sutherland's bill would be decidedly injurious to the interests of the vegetable oil industries.

What would happen to the herring industry of Alaska if the reduction plants were allowed to use only the offal for the production of herring oil is illustrated by a somewhat similar condition which arose in California in connection with the sardine industry. The California Fish and Game Commission issued a regulation prohibiting the sardine industry from using any whole sardines in the reduction plants, resorting to an injunction in the courts to enforce their ruling. The injunction was enforced and all the sardine plants in California ceased to do business, closing down their entire sardine operations both for food purposes and for by-products, as it was impossible for them to run one department without the other. Upon observing the drastic effect of their ruling the California Fish and Game Commission modified same and the California sardine people resumed operations. This, it appears, would be the inevitable outcome in Alaska if Representative Sutherland's bill became a law.

It appears that the sole idea of Representative Sutherland in promulgating the legislation which he has proposed is that the halibut and king salmon industries require the use of frozen and fresh herring, respectively, for bait. He has no idea that the herring themselves will be used in any particular large quantities for food purposes. On examination of the facts, however, it appears that the halibut industry, to begin with, is not as big as the herring oil and meal industry, and consequently there is no difficulty about their getting herring for bait if the people who supply same will go about the matter intelligently. In the case of the king salmon industry it appears that they require fresh herring for bait, and the herring oil reduction plants have offered to cooperate with them to supply all the herring for bait that they need.

It appears that there has been no depletion of the run of herring in Alaskan waters, as proven by the catch being of about the same volume over a period of years, with the exception of one year, 1926, when there was an exceptionally large run. It is to be hoped, therefore, that this proposal of Representative Sutherland can be defeated.

Another bill proposed which would do no good to the vegetable oil industries if allowed to become a law is that of Congressman A. Piatt Andrew of Massachusetts. This bill is H. R. 5464, and it proposes to allow the removal of any article now on the free list therefrom and the placing of same on the dutiable list. This would be accomplished under the terms of section 315 of the flexible tariff provisions.

Congressman Andrew has in his district certain producers of calfskin leather, and it is these people who are primarily responsible for the introduction of this bill. However, if it became a law, short-sighted individuals with an axe to grind would be trying to put duties on such articles as chinawood oil, copra, sulphur olive oil, etc., which would then be possible under the terms of the flexible tariff provisions, as is not now the case.

Congressman Hull of Tennessee has a bill, H. R. 6667, which proposes to repeal all of the provisions constituting the flexible tariff act. Congressman Hull maintains that the President has lowered only the duties on millfeeds, paint brush handles, bobwhite quail, carbolic acid, and crescylic acid; whereas, he has increased duties on eighteen other items, some of which are of very considerable importance. Congressman Hull thinks that the only way to remedy the situation is to eliminate the flexible tariff provisions.

In view of the fact that the vegetable oil industries have expended a very considerable amount of money and effort in prosecuting its cases for reduction in the rates of duty on linseed oil, soya bean oil, coconut oil, peanut oil, etc., it is to be hoped that the congressman does not accomplish his object, as these cases are as yet undecided, although now nearing completion.

The McNary-Haugen bill, which proposes to bring about farm relief, has again been started through the legislative mill. At this stage of its progress it seems to have lost some of its former adherents, which will weaken its chances of being passed over a presidential veto unless the support lost is regained. This bill is H. R. 7941. It is not so drawn up that it would affect the vegetable oil industries directly, but its reflex actions would unquestionably disturb economic conditions in the industry.

Senate resolution 52, introduced by Senator McMaster of South Dakota, has passed the senate and places that body on record as favoring immediate reduction of all excessive duties in the tariff act of 1922. The house of representatives, however, has taken a contrariwise position in its vote upon the resolution, so that the situation remains unchanged with the exception that it is now obvious that there is a very well defined belief in political quarters that general tariff revision is needed.

The mixed oils decision by the United States Court of Customs Appeals, which has been published as T.D. 42473, seems to clearly establish that mixed oils are to be regarded as a legitimate article of commerce and that such oils can enter the country on the payment of a 25 per centum ad valorem duty on the basis of the foreign valuation of the mixed oil.

It would appear that, in view of this circumstance, the United States Tariff Commission ought to hasten all possible the consideration of the applications for reduction in the rates of duty on linseed oil, soya bean oil, peanut oil and the other oils, as it would be decidedly better to have the pure article admitted into the commerce of this country at a reasonable rate of duty in place of forcing the consumers to utilize the various mixtures which will now be imported under T.D. 42473.

The Southern Ports Foreign Freight Committee has recently docketed a proposal to increase the rate of freight on vegetable oils and oilseeds moving from gulf ports into the interior, which proposal does not appeal at all to the vegetable oil industries. Vigorous opposition will be advanced by them towards any effort to increase the freight rates on chinawood oil, coconut oil, copra, palm oil, palm kernel oil, soya bean oil, perilla oil, etc., as set forth in docket bulletin No. 335 of the Southern Ports Foreign Freight Committee.

Effort is being made to secure the absorption arrangement for coconut oil produced from imported copra by crushers on the Pacific coast. It seems eminently proper that they should have the same absorption arrangement extended to them which has been so successfully carried into operation in respect to all imported oils moving through Pacific coast ports from the Orient and the Philippines.

The United States Shipping Board has been rendering excellent service to vegetable oil consumers in the United States. Deep tanks have been placed in practically all vessels plying the Pacific trade routes and adequate tonnage is now available for the entire vegetable oil movement from the Orient and the Philippines.

The vegetable oil industries have recently co-operated very effectively in securing an appropriation for two new trade commissioners from the Department of Commerce to serve the vegetable oil and naval stores industries at Rotterdam and Marseilles. The appropriation has been allowed by the Senate Committee on Appropriations, and if the house conferees can be induced to leave the item in the bill the trade commissioners are assured.

The vegetable oil industries and the naval stores industry, with finished products worth $1,500,000,000 and exports of over $100,000,000, have never received the proper consideration in the matter of placing of trade commissioners abroad, as those trade commissioners heretofore placed in Europe, while rendering very excellent service to industry in general, have not been at points where they could lend much assistance to the vegetable oil industries.

The trade commissioner at Rotterdam will, if placed there, be able to adequately handle the big export business from the United States to Northern Europe in oilcake and meal of all kinds, secure for dissemination in this country a large amount of information in respect to the soap, margarin, paint and varnish, and oilseeds crushing industries, and help enlarge the export field for naval stores products. The one at Marseilles can cover the great olive oil and sulphur olive oil production of the entire Mediterranean basin and secure a tremendous volume of valuable information on the great oil and soap industries centering at Marseilles, in addition to enlarging the export field for vegetable oils, vegetable oil products and naval stores in that territory.

Aside from this, the office at Marseilles will be of tremendous value as an information center for information from Egypt, Asia Minor, and northern Africa, as the great traffic to these points from Europe largely passes through Marseilles. It is a most important port and of such importance that a trade commissioner should have been placed there long ago.

These are the important points in the Washington legislative field at the beginning of 1928, and it is to be hoped that all the vegetable oil industries will keep a close eye upon future developments as pertain to them.

H. Mart Smith

(W. R. Grace & Co., New York)

President, Oriental Oils Association

The Oriental Oils Association is concerned almost exclusively with chinawood oil, and I shall confine my remarks to that commodity in reviewing conditions prevailing during 1927.

We started the year with comparatively heavy stocks and a low price level, the lowest price having been 10½ cents per pound, basis tankcars, Pacific Coast. Starting early in the year, consumption was at an exceptionally high rate, and stocks were rapidly depleted. The political upheaval in the Yangtse valley seriously interfered with shipping at this time, causing an acute shortage of spot goods. During this period, several firms defaulted on contracts, and one that had done a lot of speculative selling was forced into bankruptcy. This caused a heavy buying movement to take place, and the market rapidly rose to the unheard of price level of 29 cents per pound, tankcar basis, Pacific Coast.

One of the factors contributing to these unreasonable prices was the attitude of so many of the consumers who persist in following a hand-to-mouth buying policy. This may be good policy when applied to domestic produce where the available supply is more or less known or when the prices are abnormally high; but it does not apply to a commodity like wood

oil, which comes from a remote section of the other side of the earth, which takes about four months to move from the point of production into the consumer's plant under normal conditions, concerning which there are no available figures of current production or stocks at point of production, and the movement of which depends on so many uncertain factors, like stage of water in the Yangtse River and tributary streams, wars, piracy, perils of shipping, and many other contingencies that cannot be foreseen.

Notwithstanding the disturbed political conditions in China and the almost insurmountable difficulties of shipping, the high price level eventually brought forth a good supply, so that, as a result, the importations of chinawood oil throughout the year were almost 50,000 tons, the second largest importations on record. After the acute period during March and April, the market gradually receded until just before the holidays it had reached the 12-cent level. At the close of the year, the market firmed up sharply due to short covering and reports of inability to ship from primary points, and at the time of writing, it has advanced to 16 cents, tankcar basis, Pacific Coast, for March delivery.

What the future holds is difficult to predict. If the political situation does not become any more involved than at present and if stocks up-country are reasonably plentiful, prices should be considerably lower by the end of March. On the other hand, should there be a resumption of warfare spread over the wood oil producing area, any price level might be attained.

The Oriental Oil Association is committed to the policy of promoting fair and ethical trading among its members and between its members and the trade in general. To this end the association has devoted many hours to the discussion of rules to regulate trading in chinawood oil. The organization has now perfected these rules and a uniform contract, and they regulate all trading between dealers. They have also been approved by a special committee of the educational committee of the American Paint and Varnish Manufacturers' Association and in all probability will be adopted as the uniform basis for the purchase and sale of chinawood oil throughout the United States. The rules clearly define the obligations of both the seller and the buyer, and they will do much to eliminate many petty disputes that heretofore have been an annoying feature of the business. The association has also provided means for settling any disputes or misunderstandings that might arise by making available to the trade an arbitration tribunal who are familiar with all phases of chinawood oil trading.

Charles G. Merrell

(Wm. S. Merrell Company, Cincinnati)
President, American Drug Manufacturers' Association

The past year opened and closed with business below the average, but the year as a whole, so far as I can estimate, was a good year for pharmaceutical manufacturers, probably averaging better than 1926.

The sale of staple pharmaceuticals is not holding up with average of the business as a whole, and the fundamental reason for this is probably traceable to the modern medical school which teaches little of therapeutics.

The specialty business in all lines is improving and almost wholly accounts for the growth of pharmaceutical business in recent years.

The general outlook for 1928 seems to be improving, and while the business outlook in general is somewhat confused by a variety of factors that are new and as yet little understood as to their possible effects on business, most houses of the progressive type are looking forward to a good volume for the coming year.

It is beginning to be generally understood that business cannot thrive as it should under excessive taxation, and while the new revenue bill may not contain all that we had hoped, such reductions as will be made will be helpful to industry and, therefore, to the country as a whole.

Special legislation on the drug industry continues to hamper the business in certain directions, but there seems to be a disposition on the part of various government bureaus to cooperate with business; so, the regulations may not be as burdensome as might otherwise be the case. All business will have to operate on economic lines to maintain normal profits, but there is indication that in the absence of unforeseen conditions arising, 1928 will offer, at least, reasonable opportunities for satisfactory profits.

There is every reason to look forward to the new year with courage and hopefulness.

R. Lincoln McNeil

(Robert McNeil, Philadelphia)
President, American Pharmaceutical Manufacturers' Association

Business conditions in the pharmaceutical field during 1927 were spotty. The first half of the year was quite normal; while the latter half was below the average. Weather conditions are no doubt the real cause for the dull period that prevailed during the fall and early winter months.

Prices remained firm during the year, even in view of the buyer's market. With the return to normalcy during 1928, there is every indication that advances will occur. Especially will this be true if general business conditions improve, as will most likely be the case. The revival of operations in the automobile industry, the proposed reduction in the income tax law, and other factors similarly favorable to business should overcome the usual lethargy of a presidential year.

No laws were passed during 1927 that greatly influenced the industry. The Federal caustic poison law, that became operative during the early part of September, is sound in principle, and the proposed cosmetic legislation does not cause much concern. It is evident from many angles that the pharmaceutical industry is in better harmony with the government viewpoint than ever before.

During the year considerable progress was made in the co-operative work with the government to establish standards on unofficial preparations. This movement should place the industry among the first to earn the right to regulate itself, which objective is strenuously urged on all trade groups by the Chamber of Commerce of the United States.

Second only in importance is the continuation of the work of standardization and simplification of formulas and the deletion of obsolete packages and items of no demand. These factors are bringing about a condition in the trade profitable both to manufacturer and consumer by reducing costs and improving the quality.

Both from within and without, conditions look favorable for the pharmaceutical industry in 1928.

H. E. Woodward

(International Druggists & Chemists Laboratories, Binghamton, N. Y.)
President, United Medicine Manufacturers of America

It is always difficult and sometimes dangerous to forecast business conditions in any industry for a coming year. In the package medicine industry for 1928 it seems particularly so, in view of the many rumored, though still, at this writing, unverified, mergers of interests between large manufacturers and retail selling organizations. Just what effect these combinations, if effected, would have on the sales interests of independent products is hard to determine. But, I see no reason to be other than optimistic. From practically all sources from which my information is drawn, manufacturers seem to expect better business in 1928 than in 1927 and are preparing for it by increased advertising expenditure.

The year of 1927 is now written off the books. While from the majority from whom I have heard it cannot be classed as a banner business year for the trade, it was, by no means, the worst the trade has experienced. Most firms report sales increased in greater or lesser degree, though in many cases at a somewhat higher cost for sales. Fall business, on the whole, was not of the best; though there were numerous exceptions to this general rule. But the general feeling seems to be that any slump in results that the last few months, due largely to unseasonable weather, have shown will be more than made up in the months immediately to come.

J. H. Marshall

(Northwestern Drug Company, Minneapolis)
President, Federal Wholesale Druggists' Association

We are just entering into another year's business, and in doing so, I have a feeling that there is a much more general feeling of optimism on the part of the heads of the various organizations with which we are connected than there has been at any time during my connection with it. A year ago, when we began our year's work, there was a very decided feeling of pessimism in regard to what the year would bring us. The climatic conditions that extended to almost every quarter of the United States during the latter part of 1926 were not at all favorable, and the agricultural districts, in particular, had felt very seriously the effects of it. We look on the agricultural districts as being, in a very large measure, the foundation from which springs a very large percent of our business. Their products are so much in excess of other natural resources that they must be treated as being in a class by themselves.

As a rule, it is my judgment that this feeling of pessimism was not entirely warranted, judging by results. With very few exceptions, the business houses with whom we are associated have experienced during 1927 a rather phenomenal business success. Sales have been larger than in any previous year, and large additions have been made of attractive accounts.

In looking forward to the coming year, I have a feeling only of optimism. Conditions surrounding agriculture in almost every part of the United States are very much more favorable than for a number of years past, and while the people connected with this industry still have their troubles and have many problems to solve, as a rule they are in very much better conditions, in my judgment, than they have been at any time during the past five years. Banks all through the country are showing, with rare exceptions, largely increased deposits. Savings banks report that the savings of the people are increasing in an encouraging manner each year. It is quite apparent that the manufacturing industries of the country are in excellent condition, and that there is a very small percent of unemployment. And while there are many problems to face at the beginning of this year, none of them appears to be of so serious moment as to threaten in any way the continued prosperity upon which we believe we entered in 1927.

I will be very much disappointed if the results of our business at the end of 1928 do not indicate that the year has been the most successful and prosperous one that we have passed through in the last ten years.

Sewall Cutler

(Eastern Drug Company, Boston)
President, National Wholesale Druggists' Association

While business conditions in some sections of the country are not as favorable as they were a year ago, other sections continue to hold their own, or are gaining ground. With the old year ended, prospects for 1928 appear favorable.

Net profits, of course, do not depend entirely upon volume of sales; but, with the present progressive ideas of merchandising, it is hoped that profits for 1927 will show up advantageously in the final figures of our association members.

F. T. Dodge

(Dodge & Olcott Company, New York)
President, Essential Oil Dealers' Association

From the standpoint of the seller, the essential oil market during 1927 has been disappointing. Practically every month of the year just ended witnessed a distinct "buyers' market." The year 1926 was marked by a steady decline in most essential oils and kindred articles and by a very sharp decline in a few of them, so that when 1927 was ushered in, the trade generally looked for some improvement in the price level of most essential oils. However, no improvement has been apparent except in a vey few outstanding instances, and these cases, it may safely be said, were not those of the so-called "major" articles. It is true that during the closing weeks of last year Sicilian lemon and orange oils became much firmer, but as the underlying cause for this advance is not yet proved (many attributing it to the innate speculative tendency of the Messina operators), too much emphasis should not be laid on it. Only a year ago, after lemon oil advanced steadily for several weeks, a decline of equal proportions followed. As little real reason could be given for one as for the other.

During 1927 the action of the following important essential oils was far from interesting, either because of the lack of any action whatsoever, up or down, or because of the long and steady decline:—Anise, bergamot, bois de rose, cassia, cedarwood, citronella (both Ceylon and Java), clove, eucalyptus, geranium, lavender, lemongrass, lime, peppermint, sandal, spearmint and wormseed.

West Indian lime oil and wormwood oil are exceedingly dear today, the continued strength of the former being due to the blight which has affected the lime industry for at least a couple of years.

One hears the usual stories from certain countries of production, that the low ruling prices of the past two years are resulting in a tendency to curb production, and it is likely that the effect of this reduction will be felt this year. There is almost a total lack of speculative interest in the essential oil line, but as consumption generally remains steady, it would seem as though the market would improve during the coming year, with respect to many of the oils. Volume is substantial; collections are good, and distribution throughout the country, while not on the scale that certain purposely optimistic journals would indicate, is very well balanced. Consumers need fear little when investing at the present price level of most of the oils, and this confidence should stimulate purchasing.

The general demand for oleoresins, balsams, vanillin,, coumarin and vanilla beans will probably show an improving tendency during 1928; in fact, the start of the improvement has already been witnessed.

With the country generally in a healthy state and with practically none of the articles in which we are interested suffering from inflation, the industry may well look forward to a profitable year. One pleasing feature, not to be overlooked, is the tendency on the part of discerning buyers to turn their attention more and more to merchandise of undoubted purity and excellence.

Benjamin Harrison Old

(B. H. Old & Co., Inc., New York)
Vice-President, American Spice Trade Association

The developments in the spice market during 1927 showed some important fluctuations of wide variations with a rather heavier distribution to fill the needs of grinders and consumers.

The policy of "hand-to-mouth" buying was largely prevalent during the year, although it must be admitted that in the case of black pepper, white pepper, and red peppers this procedure was expensive for the buyers.

As pepper constitutes such a large proportion of the total imports of spices, the course of the market is watched with constant care, and the market sentiment created by pepper consequently sympathetically affects the market or the distribution of other spices, even though there may be no relation in their respective production or consumption. During the early part of the year the pepper market sagged off, due to the fairly liberal arrivals of Malabar peppers, such as Tellicherry, Alleppey and Madras pepper. During the late spring or early summer these arivals were absorbed, and an advance began, which finally showed a rise in the price of about 50 percent on black pepper. This advance was fairly steadily maintained until the fall, when Indian "bear" operators forced the market down about 15 percent for the new crop, or January-March, 1928, contracts. These offerings were absorbed by buyers in this country, and more particularly in London, which has been carrying on a heavy "bull" speculation in pepper, which campaign has been markedly successful.

The end of the year shows the world's stock of pepper to be very light, and with predictions of a short 1928 crop of Malabar peppers, we are compelled to look to London for our immediate supplies, and the price of pepper is in the hands of the London operators who control the situation.

We have come to look upon Lampong pepper as our main source for consumption needs, but little is known as to the production of the next crop, which begins in a small way in April and May, and the time of the shipping of the bulk of the crop is during August-October from the Dutch East Indies. The market has two distinct sides, the London "bull" clique and the more timid "bear" operators in Bombay and New York. The statistical position of the article is extremely strong, and the present high prices are based on the unusual small stocks and production. White pepper followed the advance in blacks, although this advance was followed by a rather sharp decline of about 20 percent, and the question has arisen in the minds of some spice people as to whether the high price of white pepper has not turned some of the previous demand for the whites toward the blacks.

Red peppers showed an advance of about 100 percent, more particularly the Mombassa grade, owing to a practical failure of the 1927 crop making it necessary for us to go to London for their modest stock. The difficulty of securing qualities of red peppers which will comply with the standards of the United States pure food authorities has been a very important phase of the situation. The position at the end of the year is that shippers are largely refusing to guarantee compliance with these standards, and importers are increasingly unwilling to assume that heavy risk.

Cloves showed a sagging tendency throughout the year, which leaves the price of this spice about 25 percent less than a year ago. On the other hand, the New York stocks, which have been dragging along for many

(Continued on page 17)

Government in Its Relations with Business

Administrative, Legislative, and Judiciary Functioning, Prosecutions, Investigations, Trade Regulating, Tariff Revising, and Prohibition Experimentation That Occupied the Time of Federal Agencies in 1927

Federal Functioning More Friendly

A friendlier attitude of government toward business marked the functioning of most Federal agencies in the past year. The process of centralization of government and the regulation of personal and business conduct continues, but it has been influenced by the reaction against government interference.

This reaction has not been strong enough to stop the increasing of the activities of the various agencies of the Federal government, but a certain resistance has manifested itself and has caused a slackening of the pace. The long arm that reaches out from Washington, while still a good deal of a police force, nevertheless seeks to guide and help the business community along lines of conduct that serve the best interests of all.

No discussion of the government's relation to business would be complete which does not point out the growing acceptance by government officials of the aims of organized business groups to put into effect forms of self-regulation of business which would make government regulation unnecessary.

There was a time when the Federal Trade Commission harassed business by persistently ferreting out individual cases of bad practices and instituting proceedings against the offenders. Under the new rules of the commission a different principle is followed. No longer is wide publicity given to the fact that a concern has been cited. Now the concern is given a chance to state its case and clear its name before there is pubilicity.

The Commission has gone much further, however, and has undertaken to help the members of whole industries to set up standards of trade practices which will be fair to all parties and will keep members of the trade out of the toils of the Federal Trade Commission Act. Representatives of a considerable number of industries have had conferences with the commission and have agreed on trade practice submittals. The modern idea is to proceed against bad practices as such rather than to prosecute individual violators.

Anti-Trust Views Modified

Coupled with the Federal Trade Commission's efforts is the changed attitude of the Department of Justice with respect to anti-trust prosecutions. Critics of the department have cited the falling off in the number of anti-trust suits. There is an excellent reason for the decrease in such cases. Briefly, the Department of Justice is consulting with business men, offering suggestions, pointing out the law, and giving them such information that will cause them to avoid prosecution. In other words, the department is helping to nip trade evils in the bud. The guiding hand in this process is the Assistant Attorney-General, William J. Donovan, who is charged with enforcement of anti-trust laws.

With the Federal Trade Commission and the Department of Justice now acting as friendly consultants and advisers there would seem to be no longer any excuse for business organiations to get into trouble with the law if they seriously want to do the right thing.

The revenue act of 1926 provided improvements in the staff of the Bureau of Internal Revenue. The result has been to speed up decisions. Other improvements are needed, however, and the pending revenue bill offers taxpayers the hope that the removal of more red tape will make taxpaying easier.

Of special interest to the drug trade is the recently created Bureau of Prohibition in the Treasury Department which has taken over from the Bureau of Internal Revenue those police duties involved in enforcement of the prohibition law. This change was sought by legitimate drug dealers who sometimes had cause to resent treatment they received in the process of chasing bootleggers.

The Interstate Commerce Commission, through control of railways, daily affects the interests of every business man. An outstanding decision of the commission in 1927 was the case of the St. Louis & O'Fallon Railroad, which is being singled out for a test in the supreme court of the United States to decide fundamental principles which shall guide in valuations by the commission for rate-making purposes.

Another outstanding edict of the commission was the lake cargo coal case, which was hailed as marking a new regime of the commission as the equalizer of business opportunities between competing sections. In this instance it was a question of making rates that gave the Pennsylvania coal mines advantages as against the Kentucky mines.

The commission has moved slowly during the past year in agreeing to proposals for railway mergers. New legislation on consolidations is needed.

A noteworthy achievement of the Post Office Department was the establishment of the air mail service upon a paying basis. This service was started as a government enterprise. During the year 1927, however, the last line was turned over under contract to private air transport lines.

The Department of Commerce also entered the field of aviation through authority of the air commerce act, and is now aiding commercial air transportation through licensing of pilots, inspection of plants and lighting airways.

The War Department has continued its important business enterprises. At Muscle Shoals, Alabama, it is in the business of generating and selling hydro-electric power. The department's Mississippi River barge line had a good year and now is making money for the government. Sale of the barge line to private operators is contemplated by the law authorizing the enterprise. Peace-time planning for mobilization of industries in case of war has been carried forward to completion by the department.

The Department of Agriculture has the primary function of promoting farming. It affects business in many ways, however, through such regulatory activities as administration of laws governing meat packers, stockyards, cotton grading, food inspection, standards for foods, drugs and naval stores, quarantines, and the like. During the past year the department launched a campaign to eradicate the European corn-borer which is threatening the corn crops of the Middle Western States. This department also has charge of the Federal highway building program and is spending about $77,500,000 a year for this purpose.

Farm Loans Cheaper

An important change occurred in 1927 with respect to the Federal Farm Loan Board. The board has reorganized and put into effect a more businesslike plan of operation. The Department of the Treasury had urged such reforms. Since the reorganization, the board has been able to sell its farm loan bonds at 4 percent, a lower rate than was ever possible before.

The banking business is touched most vitally through the Federal Reserve Board. There was quite a flare-up last summer when the board ordered the Chicago district reserve bank to reduce its rediscount rate. There were signs that a nationwide issue would be made over the right of the board to control the rate-making functions of district banks. The storm soon blew over, but general opinion seems to be that the board will be slow about ever precipitating that issue in the future.

The United States Shipping Board has the troublesome problem of what to do with an expensive war-born merchant fleet. It is operating the ships in service on essential trade routes, but is losing money. The board wants Congress to appropriate money for more and better ships to replace the deteriorating vessels. President Coolidge, however, has voiced his disapproval of that program and he has been backed up by influential business organizations. The board made some further sales of ships to private interests.

One agency of the government which gets little publicity but which puts into circulation some $450,000,000 out of the public treasury is the United States Veterans Bureau. A large part of this sum is paid out in pensions to veterans of the World War. In addition, the Pension Office disburses about $200,000,000 a year to pensioners of the Civil War and other wars.

Surplus oil production prompted the Secretary of the Interior to take leadership in the appointment of a committee to work out methods of oil conservation. This was an aftermath of the Federal Oil Conservation Board's earlier work on this question.

The year 1927 witnessed deeper entry of the Federal Government into radio control. A Federal Radio Commission was created for the purpose of licensing broadcasting stations and allotting wave-lengths. This commission was supposed to make order out of chaos within a year and then go out of existence. Its job lacks a good deal of being finished, however, and its life may be extended by Congress.

There has been a growing resentment abroad against investigators of the United States Tariff Commission because of their efforts to learn foreign production costs. These investigations are being carried for the purpose of administering the flexible tariff clause of the tariff act of 1922.

There is continued talk of a broad reorganization of government departments. It will be some years, however, before such a program can be put into effect. Part of the program has been carried out by executive order, such as transfer of the Bureau of Mines and the Patent Office to the Department of Commerce. Movements now are on for centralization of all Federal health activities and for placing all construction work in a new Division of Public Works in the Department of the Interior.

Actions of Congress in 1927

The final session of the Sixty-ninth Congress ended March 4, 1927, by operation of law, leaving a flood of important legislative problems untouched, or at any rate unsolved. Of course, all pending legislation dies with the end of a Congress, although most of the important measures are resurrected at the beginning of the next.

The sixty-ninth was a notable Congress in point of volume of legislation. There were introduced in the house and senate together a total of 22,800 bills and 1,479 resolutions. The committees filed a total of 4,021 reports. Fourteen hundred and twenty-two acts were passed, 807 of them being public in nature. The appropriations for the fiscal year ending June 30, 1928, amount to four and one-quarter billions of dollars.

One of the most constructive measures passed by the Sixty-ninth Congress was the measure codifying the statutes of the United States. These had grown so voluminous, so difficult to discover and classify accurately, and in many cases so apparently conflicting, that there was a crying need, among laymen as well as lawyers, for codification. The Code of Laws can now be purchased in one volume, carefully classified and compiled.

The first session of the Sixty-ninth Congress enacted the present tax law, known as the revenue act of 1926; the public buildings bill, authorizing appropriations of approximately $165,000,000 for the purchase of sites and the erection of adequate buildings for governmental occupancy and use; the Watson-Parker railroad-labor disputes bill, abolishing the Railway Labor Board and creating a board of mediation; the Haugen bill creating a division of co-operative marketing in the Department of Agriculture; a resolution favoring adherence to the World Court, with reservations, and three bills for the promotion of aviation, one civil, one military, and one naval.

The Gooding long-and-short-haul railroad rate bill was defeated in the senate during the session, but the proposal apparently will not down permanently. The old McNary-Haugen "farm relief" bill providing for the assessment of an "equalization fee" to be collected from the producers of certain basic agricultural commodities at the time of sale was vetoed. The Haugen bill which finally passed and became law merely creates a division of co-operative marketing in the Department of Agriculture and defines its duties. It does not provide for a subsidy of any kind, for the issuance of export debentures, for an export corporation, or for "price stabilization"—all of which are among the numerous proposals for farm relief.

The Sixty-ninth Congress at its final session passed the McFadden-Pepper branch banking bill, which, among other things, makes the charters of the Federal reserve banks indeterminate instead of being limited to twenty years, which would have caused their expiration in 1933. It also placed national and State banks more nearly upon an equality in the matter of branch banking, except that branches of the former may not be located outside of the city in which the main office is situated, nor may there be a branch in a city of less than 25,000 population, nor more than one in a city of less than 50,000, nor more than two in a city of less than 100,000. Beyond that the matter rests in the discretion of the comptroller. Specific authority is given to engage in the business of buying and selling investment securities and carrying on a safety deposit business. Permission is given for the issuance by the national bank of stock dividends against accumulated surplus without converting the same into stock for subscriptions. And the power of the national banks to make loans against real estate is greatly enlarged.

Foreign Commerce Service

A bill was passed to give the foreign commerce service a permanent legal status, and the duties of commercial agents and attaches were defined in the act.

A workmen's compensation act for maritime workers, covering workmen employed on the navigable waters of the United States in loading or unloading vessels of less than 18 tons' burden, was enacted. The act does not cover seamen or the masters of vessels, but is restricted to longshoremen and harbor workers and other persons coming within the term "maritime workers."

A bill was passed which makes firearms capable of concealment on the person non-mailable except in accordance with regulations issued by the Postmaster-General.

A federal radio commission of five members was created. This commission, which under the original law was to exist for one year only (its authority thereafter to vest in the Secretary of Commerce) was given broad jurisdiction over the licensing of stations and the allocation of wave lengths.

A large number of measures pending when the Sixty-ninth Congress ended were certain to make their reappearance when the Seventieth Congress met in December, 1927. Most of them have done so. Among those which are sure to consume much time and attention in the present Congress are the alien property bill, providing for the final release of all alien enemy property now held by the custodian; a bill for the regulation of buses and trucks operated as common carriers in interstate commerce; the French debt agreement; the Turkish commercial treaty, which failed of ratification during the Sixty-ninth Congress; a bill for railroad consolidation; a number of bills relating to disposition of Muscle Shoals; a bill for important revisions of existing postal rates; the Boulder dam bill; and a bill to regulate the mining and distribution of coal.

Tariff Reduction Urged

At its opening the present Congress faced a renewal of the fight for the adoption of the McNary-Haugen farm relief bill, or a substitute for it. A strong fight was in prospect in the senate over a resolution calling for immediate lowering of tariff rates. The house quickly passed a revised tax bill, which was pigeonholed in the Senate Finance Committee until after March 15, when it is expected that the treasury collections will indicate just how much tax reduction the country can afford. The deficiency appropriation bill, which was lost during the closing days of the old Congress, was speeded through both houses before the holidays.

A bill for revision of the postal rate structure has been introduced, which contains important proposals. Among them are the repeal of the service charge on parcel-post packages, and restoration of the one-cent rate on private mailing cards.

The measure for regulation of motor transportation has been awaiting the issuance of the report of the Interstate Commerce Commission based on the extensive hearings it took at numerous places in the country, which indicate the nature and extent of the problem of regulation.

The first month of the present session of the senate was largely concerned with refusing seats to two senators-elect, Smith of Illinois and Vare of Pennsylvania. Other investigations proposed were concerned with the Continental Trading Company (one of the oil companies connected with the Tea-

pot Dome lease), the relationships and political activities of public utility gas and electric companies, and conditions in the coal strike areas of West Virginia, Pennsylvania and Ohio. As Will Rogers says, "The senate begins with a prayer and ends with an investigation."

Federal Trade Commission Activities

New conceptions of the part the Federal Trade Commission occupies in the commercial life of the nation have come into existence recently, and, being applied, resulted in far-reaching development in 1927.

The newer policies have principally to do with the idea of self-regulation in business and industry, and the commission has progressed in this direction without overstepping the bounds of its powers as defined by law. The commission itself declares its new policy to be that of helping business to help itself wherever and whenever it can be done consistently without prejudice to the public as a whole.

This policy shows itself in the number of cases settled by stipulation without publicity, in permitting accused firms to have a hearing before issuance of a complaint, and in the encouragement of trade practice conferences.

The division of trade pratice conferences has been created to handle and enlarge upon the procedure formerly known as a trade practice submittal. It is a procedure whereby business or industry may take the initiative and make its own rules of business conduct, its own merchant law, subject, of course, to sanction or acceptance by the commission. The procedure deals with an industry as a unit. It is concerned solely with practices and methods, not with individual offenders. It regards the industry as occupying a position comparable to that of "friend of the court" and not as that of the accused. It wipes out on a given date all unfair methods condemned at the conference and thus places all competitors on an equally fair competitive basis.

So important has been the growth of these trade practice conferences that the Chamber of Commerce of the United States at its 1927 annual meeting urged the elimination of all wasteful practices and trade abuses by the formation in each trade of a joint trade relations committee composed of representatives of every branch of the trade, and declared that such committees should co-operate with the Federal Trade Commission in the elimination of trade abuses.

Trade Practice Conferences

Among the trade practice conferences held during 1927 were those with the butter, egg, cheese and poultry industries of the Pacific Coast, the correspondence schools, woven furniture industry, motion picture producers, golf ball industry, shirting fabrics industry and the edible oil industry. This last-named conference, which was held in New York December 9, resulted in condemnation of misbranding of edible oil or its packages, and fixed the standard weight per gallon at 7.61 pounds for olive oil and 7.7 pounds for all other edible vegetable oils.

Co-operation with business is also carried on by the Federal Trade Commission through the recently adopted practice permitting a prospective respondent to have an informal hearing before the board of review before a complaint is issued. The primary purpose of the hearing is to afford the proposed respondent an opportunity to show cause why a complaint should not be issued against it, and also to afford the commission an opportunity to secure all possible facts relating to the alleged violation of law before the commission **and the respondent** are aligned against each other in an adversary proceeding.

Another measure of co-operation with business is the rule permitting certain minor cases to be settled in the public interest by stipulation. This means that a concern complained against may agree to discontinue alleged unfair acts and thereby dispense with the necessity of a formal complaint's being issued with a view of securing a cease-and-desist order. The commission makes public the results of stipulation proceedings in an impersonal manner, eliminating the names of those involved, but stating the practices concerned, so that the public and the rest of the trade may be informed.

Another new rule of practice of the commission provides that in every order to cease and desist from a certain practice the respondent be given a specific number of days in which to report in what manner he has complied with the order. The rule also provides that the commission may, upon cause, reopen any case for further consideration within 90 days of the order to cease and desist or dismissing the complaint.

Price-Maintenance Study

Four important general investigations by its economic division were ordered by the trade commission in 1927. One of these relates to the practice of resale price maintenance and contemplates its economic advantages or disadvantages to manufacturers, to distributors and to consumers; costs, margins and profits on price-maintained and non-price-maintained goods; and purposes and results of price-cutting. By the close of the year the commission had completed and sent out to manufacturers of trade-marked articles a large questionnaire designed to secure this information. It was the tentative plan of the commission to follow this with questionnaires to distributors and retailers and to make a report to Congress on its findings.

Another investigation ordered by the commission on its own initiative deals with the fraudulent sale of worthless securities, blue sky stocks and wildcat schemes for getting rich quick at the expense of the public. A third investigation is being made into the financial relationships of the several large industrial corporations, while the fourth economic investigation deals with the various forms of price bases and quotations of prices at point of production, delivered, or at a certain basic point, regardless of point of production or consumption.

Field work was completed and preparation of a report was begun on the investigation ordered by Congress on March 2, 1927, into the activities of cottonseed crushers, refiners and dealers, to ascertain if violations of the anti-trust laws or illegal combinations to fix prices were present in the industry. A report on stock dividends ordered by Congress was completed and sent to the senate in December. The close of the year saw virtual completion of the reports on the electric power and the flour and bread industries, and progress in the investigations of lumber trade associations and open-price associations and co-operative organizations generally.

December 12, the commission sent to Congress its report on the petroleum industry, which declared that no recent evidence of agreements or manipulations of any size among large oil companies to raise or depress prices of crude petroleum or refined products could be found.

Shortly before the close of the year the commission designated Commissioner Abram F. Myers to co-operate with the newly created division on trade associations of the Chamber of Commerce of the United States.

By far the greater number of the individual cases handled by the Federal Trade Commission during 1927 dealt with unfair competition in labeling or advertising products. The more important of these cases not settled by stipulation and concerning which cease and desist orders were issued dealt with so-called "Havana" cigars, "Castile" and "English" soaps and "Philippine mahogany" and other designations of furniture woods.

Price-Maintenance Nearer Reality

With legislation to permit the maintenance of resale prices on trade-marked articles at a stalemate in Congress, the Federal Trade Commission in the summer of 1927 undertook an ambitious investigation of the economics of price-cutting and price-maintenance, with a view of reaching some definite conclusions on this much-discussed question.

The adjournment of Congress in the spring saw the death in committee pigeon-holes of several bills to permit price-maintenance. Most prominent was that fathered by Senator Arthur Capper of Kansas and Representative M. Clyde Kelly of Pennsylvania. Although a sub-committee of the House Committee on Interstate and Foreign Commerce got so far as to suggest some technical changes in the wording of this bill, the majority of the committee disapproved of it, and it never reached consideration on the floor of either house.

Meanwhile the Federal Trade Commission, in its attempts to maintain free and open competition, continued its fight against various forms of price-fixing schemes, although it lost its appeal to the Supreme Court of the United States for a reversal of a Federal court's action in setting aside its order against the price-maintenance plan of Harriet Hubbard Ayer, Inc. Then the commission remembered that, in addition to prosecuting specific cases of business abuse, it was directed by its organic act to "gather and compile information concerning and to investigate from time to time the organization, business conduct, practices and management of any corporation engaged in commerce . . . and its relations to other corporations and to individuals, associations and partnerships."

Myers Suggests Study

Accordingly, upon resolution of Commissioner Abram F. Myers, the trade commission voted to undertake an investigation to learn the facts about the advantages and distadvantages of resale price-maintenance to manufacturers, wholesalers, and retailers; costs, margins and profits of manufacturers and distributors, and the prices to consumers; causes and motives of price-cutting by distributors; and the relation of retail price-maintenance to the multiplication of distributors. The investigation is being conducted by Dr. Francis Walker, chief economist of the commission, and is an economic rather than a punitive study, its object being to find the facts for the benefit of Congress and of business.

Resale price-fixing is admittedly one of the most perplexing problems before the Federal Trade Commission and before trade and industrial associations as well. Conflicting decisions have been handed down by the courts; so that a business man is at a loss to know the legal limitations on his desire to prevent price-cutting on his products. Among commercial leaders there is a sharp division of opinion as to the extent to which prices can and should be regulated. The commission had this in mind when it initiated its survey, the first comprehensive undertaking on this subject in the country.

Instead of conducting a keyhole investigation, the Federal Trade Commission decided to ask openly for the facts it desires, believing that business men and trade associations would co-operate toward a speedy and comprehensive report on the subject of price-maintenance. Questionnaires have been prepared and submitted to manufacturers of trade-marked articles of all descriptions, with a view of ascertaining the costs, margins, and profits on articles on which the price in maintained and on articles which are freely dealt in by price-cutters. If this venture proved successful the commission planned to submit similar questionnaires to wholesalers and retailers. No opinions are asked in these questionnaires, their object being to determine if price-cutting pays or if price-maintenance means exorbitant profits.

Regardless of this investigation, the Capper-Kelly "fair trade" bill was again introduced at the opening of the Seventieth Congress. Its backers realized that Congress was unlikely to act on it until the trade commission had made its report, but they wished to keep the matter continually before Congress. Recently several national trade associations have endorsed this measure, and they have also endorsed the trade commission's investigation, some of them aiding in drafting the questionnaires and in urging manufacturers to supply the necessary facts about their businesses.

Tariff Administration Procedure

The flexible provisions of the tariff act of 1922 were brought into frequent play during the past year, the chemical industry being concerned in many of the changes in duty requested.

The commodity divisions of the United States Tariff Commission were kept busy throughout 1927 conducting field investigations and holding hearings to ascertain the comparative costs of domestic and foreign production of the articles on which duty changes were sought.

Acting upon reports of the tariff commission, President Coolidge made seven changes in duties, five increases and two decreases. In February, the duty on gold leaf was increased from 55 cents to 82½ cents per 100 sheets. In February, also, the duty on iron in pigs was increased from 75 cents to $1.12½ per ton. In June the President ordered an increase in the duty on cheese with eye formation characteristic of the Swiss or emmenthalen type from 5 cents per pound and 25 percent ad valorem to 7½ cents per pound and 37½ percent ad valorem. In August a decrease was ordered in the duty on refined cresylic acid (cresol U. S. P.) from 40 percent ad valorem and 7 cents per pound to 20 percent ad valorem and 3½ cents per pound. In October the President ordered that phenol be given the same reduction ordered for cresol. In November the duty on crude and caustic magnesite was increased from 5/16 cent to 15/32 cent per pound and that on calcined magnesite from 5/8 cent to 15/16 cent per pound. In December the President authorized an increase from 2 cents to 3 cents per pound in the duty on cherries, sulphured or in brine, stemmed or pitted.

Production Costs Sought

The chemical division of the tariff commission, which deals with articles named in title one of the tariff act, had a variety of production cost investigations before it in 1927. A hearing on the application for an increase in the duty on barium carbonate was held May 23, and the close of the year saw a report to the President in the course of preparation. Production costs were obtained and preliminary statements were begun on applications for increases in the duties on tartaric acid and cream of tartar. May 25 the commission instituted three inquiries, dealing with requests for increased tariff on sodium phosphate, potassium permanganate, and whiting and precipitated chalk; during the year the chemical division ascertained the domestic and foreign costs of production of these articles. A hearing on the application for an increase in the tariff rate on sodium silicofluoride was held June 20, and a report for the President was still in preparation at the close of the year.

Both increase and decrease in the duty on edible gelatin were asked, and data were obtained and a report to the President begun during the year. The commission's advisory board received from the chemical division a report on the costs of producing glue here and abroad. An application for a decrease in the tariff on linseed oil had previously been considered, and a report made to the President, but it was returned by him for further inquiry, which was conducted during the year.

The ceramics division of the commission held a hearing May 9 on the inquiry into the production costs of cast polished plate glass and conducted studies on this question during the year. May 26 it held hearings on crown, cylinder, and sheet glass, and on blown glass perfume bottles and bottles for toilet preparations, and undertook field work to secure further data on the costs of producing these articles.

The chemical division completed in September its tenth annual census of dyes and other synthetic organic chemicals in the United States, and included in this publication comparative figures of the peak year, 1923, on coaltar products and synthetic organic chemicals not of coaltar origin, and also detailed statistics on the imports of dyes and a discussion of the international trade in dyes in 1926.

In connection with the purpose for which the tariff commission was originally created, as a fact-finding body to aid Congress in enacting tariff legislation, the chemical division brought down to date its studies of aluminum compounds, phosphorus and its compounds, nitrogen products and other products. Its investigations to aid the President in applying the flexible provisions of the tariff have kept the commission in close touch with the tariff needs of industry so that should Congress call on the commission for information it could supply the needed data without difficulty.

Imports of Patented Articles

Section 316 of the tariff act, giving the President power to prevent importation of articles found to compete unfairly with domestic products, was called into play during the year. The President invoked this authority against the importation of manila rope containing sisal when not properly branded, and of cigaret holders, novelties and jewelry made of multi-colored synthetic resin which infringed American patents. A petition of the Bakelite Company for action under this section against the importation of synthetic phenolic resin of form C because of patent infringement was heard by the commission February 8 to 12, and a report was issued May 26 giving the President basis for placing an embargo on the foreign product. Before he could act, however, the importers appealed the commission's findings to the United States Court of Customs Appeals, the first time that the right of such an appeal had ever been exercised.

The appeal was taken on questions of law, it being held that the tariff commission had no jurisdiction over patent infringement cases, and that in undertaking to pass on a case of this character the commission was guilty of an unconstitutional exercise of legislative and judicial functions of a ministerial body. The case was set for a hearing in the court in the closing days of December, and matters of constitutional law were argued before it. In December the commission docketed another application from the Bakelite Company seeking exclusion, under section 316 of laminated sheets, strips, and tubing made with synthetic resin, again bringing up the matter of unfair competition through patent and trade-mark infringement.

The reliance by the tariff commission on statutes forbidding disclosure of individual business figures in refusing to divulge domestic production costs was taken to the courts in the case of the investigation of sodium nitrite. Without passing on the question involved, the Supreme Court of the United States held that the question was moot since the President meanwhile had increased the duty in question.

A case attacking the constitutionality of the flexible provisions of the tariff act was filed with the supreme court during 1927. It was brought by J. W. Hampton, Jr., & Co., on appeal from the United States Court of Customs Appeals in a case involving the duty on barium dioxide.

An important ruling concerning the tariff commission's work in ascertaining foreign costs of production was made by the attorney-general October 19. He held that in a case where the invoiced price of imported goods plus

the existing duty together did not total as much as the domestic cost of production, the commission was justified in not attempting to ascertain exact costs of foreign production but in bringing a finding that the difference in foreign and domestic costs warranted an increase in duty.

United States Gets a Poison Law

The United States got in line with the several States in having a "poison" law on the statute books when the Federal caustic poison act was passed by Congress and became law March 3, 1927. The far-reaching effects of this act were little known to Congress or to industry at the time of its passage, but during the year these effects became more and more evident, and opposition, probably too late, became stronger and stronger. Failure of Congress to appropriate funds for enforcement before December prevented the full force of the act from being felt last year. However, regulations for its enforcement were perfected, during which process an aroused industry predicted disastrous results from the application of the law.

Described as being designed only to require uniform labeling of household lye and a few other similar substances so that unknowing folk would not let children be injured thereby, the caustic poison law was drafted and engineered by the American Medical Association. The lye manufacturers, harrassed by a diversity of state labeling laws, approved the bill insofar as it applied to them. A few representatives of the drug and other industries saw the danger in the bill, but they were unable to arouse enough opposition to be reflected in Congress, and the bill passed without debate or explanation.

Technically, the law went into effect September 4, but there were no funds for its enforcement, and regulations under the law had not been promulgated by the Secretary of Agriculture. During September hearings were held before the Food, Drug and Insecticide Administration, at which representatives of many organized industries appeared to urge various limitations in the regulations. A tentative draft of the regulations was published, and the administration considered requests for changes.

By this time it was discovered that the law would require labeling and Federal inspection of a great variety of articles of commerce and medicine. It was protested to the administration that the regulations were too inclusive; that they went for beyond the intent of the act; and that they should be rewritten and narrowed down so as to apply only to lye and cleaning compounds of caustic composition. The administration declared that the regulations were the only ones possible to be written consistently with the law; that the law itself was at fault if its scope was discovered to be wider than was supposed when it was before Congress; and that the Department of Agriculture did not seek the law, but is required to enforce it as Congress wrote it.

The administration's view prevailed, and in December the Secretary of Agriculture promulgated the regulations, containing many provisions objected to by industry. In December also Congress appropriated funds for enforcement of the Federal caustic poison act, and it took effect. The field force of the Food, Drug and Insecticide Administration was directed to study the formulas and products of all manufacturing plants to determine exactly what articles come within the scope of the law. It was expected that they would discover a great many preparations in every-day use which must be given "poison" labels. Because many manufacturers and distributors are unaware that their products come within the law, it was announced that there would be no prosecutions under the act until all concerned had been given notice and ample opportunity to comply with the labeling provisions.

Scope of the Act

The caustic poison act applies to any preparation suitable for household use which contains the following:—

Hydrochloric acid and any preparation containing free or chemically unneutralized hydohloric acid in a concentration of 10 percentum or more;

Sulphuric acid and any preparation containing free or chemically unneutralized sulphuric acid in a concentration of 10 percentum or more;

Nitric acid or any preparation containing free or chemically unneutralized nitric acid in a concentration of 5 percentum or more;

Carbolic acid, otherwise known as phenol, and any preparation containing carbolic acid in a concentration of 5 percentum or more;

Oxalic acid and any preparation containing free or chemically unneutralized oxalic acid in a concentration of 10 percentum or more;

Any salt of oxalic acid and any preparations containing any such salt in a concentration of 10 percentum or more,

Acetic acid or any preparation containing free or chemically unneutralized acetic acid in a concentration of 20 percentum or more;

Hypochlorous acid, either free or combined, and any preparation containing the same in a concentration so as to yield 10 percentum or more by weight of available chlorine, excluding calx chlorinata, bleaching powder, and chloride of lime;

Potassium hydroxide and any preparation containing free or chemically unneutralized potassium hydroxide, including caustic soda and lye, in a concentration of 10 percentum or more;

Sodium hydroxide and any preparation containing free or chemically unneutralized sodium hydroxide, including caustic soda and lye, in a concentration of 10 percentum or more;

Silver nitrate, sometimes known as lunar caustic, and any preparation containing silver nitrate in a concentration of 5 percentum or more; and

Ammonia water and any preparation containing free or chemically uncombined ammonia, including ammonium hydroxide and "hartshorn" in a concentration of 5 percentum or more.

Definitions and Exemptions

The regulations under the act define the word, "container," as including any retail parcel, package or container suitable for household use and employed exclusively to hold any dangerous caustic or corrosive substance as defined in the act. The words "suitable for household use" are defined to mean adaptability for ready or convenient handling in places where people dwell.

Each article coming within this scope must bear the common name of the substance as used in the act or other name usually used to describe the preparation, must bear the name and address of the manufacturer, packer or shipper, must bear the word "poison" in large, plain letters, and must bear directions for quick treatment with readily obtainable antidotes in case the preparation causes accidental personal injury. The antidote may be omitted from retail packages not intended for household use.

Retailers are exempt from the act if they hold guarantees from the manufacturer or wholesaler of the product that it is labeled in conformity with the act, but if such guarantee applies only to articles not intended for household use and the retailer diverts them for such use he is required to relabel the goods.

General enforcement provisions of the Federal caustic poison act are modeled after those of the food and drugs act.

Chemical Cartel Progress in Europe

A threat against the war-born chemical industry of the United States through international agreements among the industries of European countries took shape during 1927 and advanced to a point where it became tangible and aroused the inerest, if not the apprehension, of every American chemical manufacturer.

The close of the year saw announcement of a definite working agreement between the dye industries of France and Germany, with negotiations pending for British entry into the scheme, and plans laid to perfect agreements covering other branches of the chemical industry among various nations. The Franco-German dye accord in itself concerns American industry very little, but the step is important in its direction rather than in its length, and is regarded as an unmistakable symptom of the long-rumored all-inclusive European chemical cartel.

As was expected, the cartel movement, although showing progress over a long period of time, met with many local and temporary set-backs during the year. National cartels, or agreements between the members of an industry as to prices, sales policies, and other business practices, have existed for generations in Europe, where anti-trust laws of the U. S. sort are unknown, and where, perhaps, not so high a premium is placed on individual initiative and freedom of action. During 1927, this form of organization spread in different industries in various European countries. It was generally described as a rationalization of the industry, but purposely or unwittingly this process lays the way for the next logical step—international agreements within the industry. The moving forces behind the cartels declare that there will be no combination in restraint of trade, and no artificial increase in prices as a result of their organization, and the European public does not seem to fear such results.

The proposed object of the cartel is to reduce waste, overproduction, cut-throat price competition, and part-time operation. A total output is usually agreed upon, based on past production and estimated consumption, and each manufacturer is given his annual quota. Competition in domestic selling may remain as before, but export sales organizations are usually merged, and foreign trade is conducted in the name of the entire national industry. Some cartels have been much more successful than others in perfecting a close organization. Because of the patent situation the chemical industry lends itself to the cartel idea better than many others.

A review of the cartel news of the year shows forward and backward moves, but leaves the unmistakable impression that industry, particularly the chemical industry, is thinking and working toward world-wide combinations, that where there is so much smoke in the sense of rumors of combines there must be some fire in the sense of actual attempts at combination.

German Chemical Agreements

January, 1927, saw the announcement of the formation of a German sodium sulphide convention with the control resting in the I. G. Farbenindustrie, A. G., the German dye trust, which for several years has controlled the greater part of the German chemical industry. Simultaneously came the announcement of a concentration in the German superphosphate industry, and on the heels of this the report that an international superphosphate producers' association had been formed in London, a working agreement among the producers of synthetic fertilizers of England, Germany, Belgium, Czecho-Slovakia, Norway, Denmark, Sweden, Poland, Finland, French North Africa and the Union of South Africa.

Early in February there was talk of a merger between the dye industries of Germany and France, and shortly after this came rumors that the German I. G. was carrying on cartel conversation with Imperial Chemical Industries, Ltd., the recently formed British chemical combine. These rumors continued and late in the spring came reports that a British-German dye accord was certain to be completed in the near future.

The United States saw at first hand the workings of cartels in May when the previously formed French-German potash combine turned its American sales business over to a Dutch concern and merged the previously competing American sales organizations. About the same time came an unconfirmed report that the German dye trust was planning to establish a chemical plant in the Louisiana natural gas fields for the production of methanol and liquid fuels.

In the zinc industry, cartel plans smouldered. During the summer there was talk of an international accord to include the leading factors in the industry in the United States, the British Empire, Belgium, Grance and her colonies, Germany, and Poland. The Belgian zinc industry made an attempt at closer national organization, while leading firms in Germany and Poland formed a working agreement between themselves. Rumors of the international zinc trust continued through the year.

The fertilizer industry of Czecho-slovakia completed a sales cartel in July, about the same time that it was evident that Chilean nitrate sales were stationary or declining while production of synthetic nitrogen was supplying the large increase in world nitrate consumption. Several other national industrial combinations were reported in the summer and fall, including the Polish petroleum cartel, all of which were looked upon as but argument and preparation for the general international chemical accord. The desirability of such an accord was talked of more and more in Europe during the summer, but only stray bits of gossip reached American business in general, and only a few American business men took more than a passing interest in possible developments of the League of Nations' economic conference at Geneva.

In the early fall there returned from European visits two representatives of the United States Department of Commerce, Dr. Julius Klein, director of the Bureau of Foreign and Domestic Commerce, and C. C. Concannon, chief of that bureau's chemical division. Both of these had much to tell American industry about threatened European competition in international trade. They told of the prevalence of discussion of international trade combines, either including or excluding the United States, and warned that imminent developments in European business would vitally concern American business.

On top of this discussion came announcements that in Germany, the leader of the cartel movement, both national and international, agreements had been completed in the benzol and sodium silicate industries, that a German-Austrian heavy chemical cartel had been signed, and that the Belgian chemical industry was organizing. There were also rumors of plans being formed for an international white lead combine and for a world-wide agreement in the nitrate industry. Another rumor concerned attempts of the German dye trust to buy controlling interests in this or that American chemical firm.

Vital Consequences Foreseen

In October the Oil, Paint and Drug Reporter sent to leaders in the American industry a questionnaire, with a view of determining how seriously the cartel movement in Europe might affect the chemical industry in the United States and what might be done about it. The replies (October 24 issue, page 21) brought forth a variety of ideas, but a unanimity of opinion that impending developments abroad held vital consequences for American business.

Then, in November, came definite, official announcement that a working agreement had been signed between the dye industries of Germany and France. The world markets were to be divided between them on a fixed export quota, and joint foreign sales offices were to be established. Other countries were invited to join, with a view to future inclusion of all nations, and reliable reports had it that the British dye industry, once reported on the point of joining, was completing internal organization to permit entrance to the cartel at an early date.

The result of this was that the Chemical Advisory Committee to the Department of Commerce held a special meeting in Washington at which the European cartel was intimately discussed. The committee doubled its personnel to make itself more representative of the American industry and agreed that a conference of the executives of the leading chemical industries of the United States should be called at an early date, at which economic observers of the Federal government, both those stationed in Washington and those at European posts, should advise the industry of the details of the cartel movement and the possible effects on American business.

Food-Drug-Insecticide Administration

Regulatory and scientific work of the Department of Agriculture were separated in 1927 in the formation of the Food, Drug and Insecticide Administration, and the Bureau of Chemistry and Soils.

The change was advocated by William M. Jardine, Secretary of Agriculture, and was authorized by Congress in the agricultural appropriation bill passed in the spring of 1927 and effective July 1. No new policies in the enforcement of any of the acts arose from this change, but its result is expected to be better enforcement and more productive research work. In advocating the new arrangement, Secretary Jardine declared it to be highly desirable that research work and regulatory work be handled by separate administrative units, stating that law enforcement must be handled promptly as cases arise, and when both this and scientific work are done by the same organization the natural thing is to put aside research which is of far-reaching importance to agriculture and which should not be interrupted.

Walter G. Campbell, director of regulatory work of the Department of Agriculture, was placed in charge of the Food, Drug and Insecticide Administration. This unit is charged with the enforcement of the food and drugs, tea inspection, insecticide and fungicide, naval stores, milk import, and caustic poison acts.

Mr. Campbell has been connected with the work of enforcement of the food and drugs act since it became effective twenty years ago. He was selected by Dr. H. W. Wiley as chief inspector. In that position he directed all of the inspection work under the act until 1914, when he was promoted to the position of chief of the eastern district, having charge of both inspection and analytical work in the entire eastern section of the United States. He was promoted in 1917 to the position of assistant chief of the Bureau of Chemistry, serving in that capacity until 1921, when he was appointed acting chief. He was made director of regulatory work of the department in 1923, having general supervision of all the department's law enforcement work. He has now, in addition, assumed immediate direction of the work involved in the acts assigned to the food, drug, and insecticide administration. He developed the project system which has done much to increase the efficiency of food-law enforcement. Under this system various forms of adulteration and misbranding are attacked in all sections of the country simultaneously and checked or eliminated entirely with the least expenditure of time and funds. The form of organization and system developed for the enforcement of the food and drugs act has been used as a model for the enforcement of other Federal statutes.

Dr. P. B. Dunbar, who is assistant chief of the new unit, entered the service of the Bureau of Chemistry in 1907. Since that time he has been engaged in work, either laboratory or administrative, in connection with the enforcement of the food and drugs act. Since 1925 he has been assistant chief

of the Bureau of Chemistry in immediate charge of regulatory work. He assisted Mr. Campbell in the development of the project system for enforcing the food and drugs act.

Dr. J. K. Haywood, formerly chairman of the Insecticide and Fungicide Board, has immediate charge of the work involved in the enforcement of the insecticide and fungicide act in the new unit.

Personnel Reorganized

The Washington staff of the administration was organized into supervisory administrative offices and teachnical control laboratories. The supervisory officers are:

Office of insecticide and fungicide supervision, with which is combined the supervisory work in connection with the enforcement of the caustic poison act. Dr. J. K. Haywood is in charge of this office.

Office of interstate food and drug supervision, handing all questions arising in connection with the application of the food and drugs act to interstate traffic. This office is under C. W. Crawford. Under this unit is the interstate office handling interstate records.

Office of import food and drug supervision, giving similar attention to imported food and drug products. Dr. A. E. Taylor is in charge of this office.

Office of State and city co-operation, handing all questions arising in connection with co-operative relations with State and city officials. W. S. Frisbie heads this office.

Office of business and personnel supervision, which is held responsible for personnel, accounts, supplies, files, editorial, and information work. F. B. Linton is in charge.

The technical control units are:

Food-control laboratory, which was enlarged by brigading the former food-control organization, the water and beverage laboratory, the cattle food laboratory, and the personnel of the microbiology and microchemical laboratory which comes under the food, drug, and insecticide administration. Dr. R. W. Balcom has charge of this office.

Drug-control laboratory, which includes, in addition to the units formerly embraced in that laboratory, the pharmacology laboratory. Dr. G. W. Hoover heads this laboratory.

Insecticide, fungicide and caustic poison control laboratory, which includes all the former technical laboratory work carried on under the insecticide and fungicide act except that delegated to the field service. This laboratory also has charge of the testing work to be carried on by entomologists, plant pathologists, and animal pathologists. In addition, laboratory work under the caustic-poison act is included. Dr. C. C. McDonnell is in charge.

Naval stores laboratory, which handles all work relating to the enforcement of the naval stores act. Dr. F. P. Veitch is in charge.

Special colloborative investigations, which continue a separate unit as heretofore. Dr. L. F. Kebler is in charge of this laboratory.

The field force was organized with three inspection districts, eastern, central, and western, as in the past, each district territory being further divided into station territories in accordance with the former plan. The district organization handles all the field work involved in the enforcement of all the laws assigned to the Food, Drug and Insecticide Administration. To facilitate this end, insecticide and fungicide inspectors, naval stores inspectors, and tea examiners have been assigned to the district organization to be stationed at appropriate points and to operate under the direction of district and station chiefs. One trained insecticide-fungicide chemist was assigned to each district to be stationed at the point considered most suitable for carrying on his work. The plan contemplates that all inspectors shall qualify themselves to carry out all inspection work called for by the various laws assigned to the administration. In the same way chemists of the field force are expected to familiarize themselves as far as possible with methods of analysis for all such commodities. Districts and stations may assign to certain men special lines of work for which they are particularly well qualified. The eastern and western food-and-drug inspection districts are in charge, respectively, of W. R. M. Wharton and Wendall Vincent. The central district is temporarily in charge of E. H. Goodnow as acting chief.

Scope of Bureau Extended

Dr. Henry G. Knight, dean of the college of agriculture and director of the experiment station of the University of West Virginia, was appointed chief of the new Bureau of Chemistry and Soils. The new bureau combines three important research fields in the department:—(1) chemistry, (2) soils, and (3) fixed nitrogen. These were formerly represented by the Bureau of Chemistry, the Bureau of Soils, and the Fixed Nitrogen Research Laboratory.

While each of these three groups maintains its identity in the new organization, they will be associated in such a way as to facilitate the fullest co-operation and co-ordination of the research work. The fields covered are closely related and vitally important to agricultural development.

The research work in chemistry and chemical technology embraces fifteen divisions, taking in the research units of the old Bureau of Chemistry. This work in chemistry is headed by Dr. C. A. Browne, who was chief of the former Bureau of Chemistry. Doctor Browne also acts as associate chief of the new bureau, but will, at his own request, devote his major energies to research work in chemistry.

Dr. F. G. Cottrell, who has been head of the fixed-nitrogen and fertilizer research group of divisions, continues as head of this work in the new bureau.

Dr. A. G. McCall, formerly professor in geology and soils of the University of Maryland and also formerly connected with the old Bureau of Soils of the United States Department of Agriculture, was appointed head of the soils work of the new Bureau of Chemistry and Soils.

Prohibition Changes in 1927

Events of far-reaching importance marked 1927 as an outstanding year in prohibition enforcement. Centering around legislation creating a Bureau of Prohibition in the Department of the Treasury were sweeping changes in personnel, a new attitude toward enforcement problems, revision of regulations, revival of the alcohol industrial advisory council, limitation of alcohol production, a threat of elimination of poisonous denaturants, and an attempt at government manufacture of medicinal liquor.

The year opened with three controversial subjects before Congress. A large number of deaths reported from drinking bootleg liquor during the Christmas holidays had benn alleged to have been due to denaturants, and newspapers were full of this discussion. On the first day of the year's session of Congress, Senator Edward I. Edwards of New Jersey introduced a resolution which was adopted, calling on the Secretary of the Treasury for information regarding the denaturization of alcohol. The industries legitimatly using alcohol at once flooded the Secretary of the Treasury with letters and telegrams protesting against any change in the denaturing formulas which had been found effective and practical and upon which many industries were dependent. The secretary's lengthy report to Congress, published as senate document 195, was replete with arguments against upsetting the present formulas. Nevertheless, Senator Edwards introduced a bill to make it unlawful to use poisonous denaturants in alcohol. Largely because of the opposition of industry the senate committee refused to hold hearings or consider the bill.

The administration's bill to separate prohibition work from internal revenue work was being considered by both senate and house, and soon after the first of the year Lincoln C. Andrews, Assistant Secretary of the Treasury, asked Congress to authorize a government monopoly of whisky manufacture and distribution so that there would be an assured future supply of medicinal liquor. Both measures caused great controversy and the fate of both hung in the balance until the end of the session. The whisky bill was fought by several branches of industry which feared that the government was in danger of taking their business away, and was looked on with suspicion by advocates of strict prohibition enforcement, and although the house passed a revised bill drafted by its ways and means committee, the senate failed to take action. The reorganization bill, given up for lost in the deadlock near March 4, finally was passed by the senate and became law.

Lincoln C. Andrews, whose resignation as Assistant Secretary of the Treasury had been rumored many times, left the department in the summer, and his place was taken by Seymour Lowman, formerly Lieutenant-Governor of New York. Roy A. Haynes, who for many years had been head of prohibition work under the Bureau of Internal Revenue, resigned. James M. Doran, formerly head of the technical division of the prohibition unit, was named Commissioner of Prohibition, and E. W. Camp became commissioner in the new Bureau of Customs, both under the supervision of the Assistant Secretary of the Treasury. Alf Oftedal was named Assistant Commissioner of Prohibition; James E. Jones, Deputy Commissioner for Prohibition; and L. G. Nutt, Deputy Commissioner for Narcotics.

Enforcement Attitude Changed

A new attitude toward prohibition enforcement became apparent with these changes in personnel. It was announced that the Federal enforcement work would be less directed toward minor violations, which are within the province of state and local officers and pay more attention to the conditions which make local violation easy. A policy of practical, workable measures was announced, both in the prevention of bootlegging and in relations with the alcohol-using industry.

April 1, the effective date of the act creating the Bureau of Prohibition, the working organization of the prohibition unit of the Bureau of Internal Revenue was transferred to the new bureau.

During the year a number of changes were made in organization of the bureau at Washington. The audit division was discontinued, and its activities were transferred, in part to the technical division and in part to the law division. The name of the industrial alcohol and chemical division was changed to the technical division. The name of the office of chief counsel was changed to that of law division. The legal work of the narcotic division was consolidated with the law division. A new division, called the administrative division, was created, and all administrative functions of the bureau were transferred to that division.

During the year several changes were made in districts with the view of better organizing the forces of the bureau to meet local conditions and to centralize authority over territory where the problems are similar.

The policy of decentralizing the operations of the prohibition service was continued. The control of permits within their districts has given the administrators a larger appreciation of their responsibilities. Decisions in matters of permits made by an officer himself within the district, it is felt, are more likely to be fair and just than if the officer were merely required to make a report to Washington, where the final decision would be made. This is substantiated by the decreasing number of permit matters carried into the courts. Further decentralization of the bureau was accomplished by abolishing the offices of the supervisor of alcohol and brewery control and the supervisor of wine control, the employees of these organizations having been transferred to other agencies in the field. The office of the chief investigator was discontinued and there was created in its stead the office of chief special agent.

Regulations Revised

Regulations No. 60 and 61 were revised during the year to conform to the act of March 3, 1927, creating the Bureau of Prohibition, to include rulings and decisions since the last revision in 1924, and to make such amendments and additions as appeared necessary in the control of manufacture and distribution of liquors by holders of permits.

Regulations No. 60, relating to permits under title II of the national prohibition act, was renumbered as Regulations No. 2 of the prohibition bureau. The revision is a codification of the 1924 edition and numerous amendments thereto, with further modifications conforming to the decentralized form of organization, and incorporating new provisions relative to details of operations under permits, found necessary from past experience for proper control of the traffic in intoxicating liquors, including a provision requiring all permits to be renewed annually.

Regulations No. 61, relating to the production, sale, and use of alcohol and denatured alcohol, was renumbered as Regulations No. 3 of the prohibition bureau. Important changes from the former regulations are as follows:—

(1) Transfer of supervision of the production of alcohol, its storage in bond and denaturation from collectors of internal revenue to prohibition administrators pursuant to act of Congress creating a separate bureau of the Prohibition Unit;

(2) Requirement that all applications contain stipulation guaranteeing observance of laws, regulations, etc., by permittees and employees;

(3) Renewal annually of all permits issued pursuant to Regulations No. 3 (formerly 61);

(4) Submission of duplicate samples and formulas of products to be made with specially denatured alcohol;

(5) Fixing the maximum size of packages containing barber supplies, toilet waters, and similar preparations at 1 gallon, except where otherwise authorized by the commissioner;

(6) Requiring containers of 1 gallon or less to bear commercial labels with certain exceptions.

During the year regulations No. 35, renumbered as Bureau of Prohibition regulations No. 5, were revised. These regulations relate to the importation, manufacture, production, compounding, sale, dispensing, and giving away of opium or coca leaves, their salts, derivatives, or preparations, under the act of December 17, 1914, as amended.

The act of March 3, 1927, creating the Bureau of Prohibition, made all positions in the bureau, except that of commissioner, subject to the civil service laws, and the term of office of any person transferred from the Bureau of Internal Revenue to the Bureau of Prohibition, and not theretofore under civil service, was made to expire six months after the effective date of the act.

The Civil Service Commission conducted examinations for prohibition enforcement officials, but the work of preparing a list of eligibles for appointment had not been completed by the end of the year.

Alcohol Output Limited

Limitation of the production of industrial alcohol to the requirements of legitimate industry as a check on illegal diversion to bootleg channels was proposed by Commissioner Doran in September. By eliminating what he termed the "lawless fringe" of the industry, he proposed a quantitative control as well as a qualitative control over alcohol. Realizing that such a program could be made effective only through the co-operation of the industry, the commissioner appointed an industrial advisory council composed of twelve representatives of trades affected by alcohol regulations. Similar councils had been consulted in the past, but the organization had become defunct some time before it was revived by Commissioner Doran.

The personnel of the new committee follows:— Dr. Martin H. Ittner, Jersey City, chairman of the industrial alcohol committee of the American Chemical Society and chief chemist for Colgate & Co.; Dr. Harrison E. Howe, Washington, editor of "Industrial and Engineering Chemistry"; H. S. Chatfield, New York, chairman of the industrial alcohol committee of the National Paint, Oil and Varnish Association; A. Homer Smith, of Sharp & Dohme, Baltimore; Frank A. Blair, of Household Products, Inc., New York, president of the Proprietay Association; Samuel C. Henry, secretary of the National Association of Retail Druggists, Chicago; Frank J. Noonan, of Noonan & Sons, Boston; Russell R. Brown, New York, president of the U. S. Industrial Alcohol Company and the Industrial Alcohol Manufacturers' Association; George F. Dieterle, president of the Federal Products Company, Cincinnati; C. Mahlon Kline, of the Smith, Kline & French Company, wholesale druggist, Philadelphia; Fred S. Rogers, Middletown, N. Y., president of the Flavoring Extract Manufacturers' Association; Charles L. Reese, of E. I. du Pont de Nemours & Co., Wilmington, Del.

The council met in Washington in November and elected Dr. Ittner chairman. Following this meeting Seymour Lowman, Assistant Secretary of the Treasury, announced that the industry had agreed to a reduction in the 1928 alcohol production of some 10,000,000 gallons, to a total of 85,000,000 gallons, each plant to effect a pro-rata reduction. Should this not meet the demands of industry, the figure was to be revised. Assurances were said to be given consumers that the restriction would not increase prices or make it impossible to secure sufficient alcohol for normal business.

Work of the Federal Courts

At the beginning of the fiscal year ended June 30, 1927, there were pending in the Supreme Court of the United States, the nine circuit courts of appeals, the court of customs appeals and the court of claims, 3,950 cases. During that fiscal year these courts disposed of 4,236 cases, the total number filed during the year being 3,963. This left a carry-over of 3,677 cases pending at the beginning of the present fiscal year. In the district courts of the United States, of which there are about ninety, 154,228 cases were instituted during the fiscal year, 1926-27.

Ten cases were reported to the Department of Justice for prosecutions under the plant quarantine act during the year; sixty under the animal quarantine acts; forty-two under the meat inspection act; thirty-five under the insecticide and fungicide act; and 813 under the food and drugs act, seventy-nine of the latter being criminal proceedings, and the remainder seizures of goods found in violation of the law.

Price-Maintenance Upheld

Several important anti-trust decisions were handed down by the supreme court. The court sustained the right of a manufacturer to maintain the resale price of its goods where it operates through bona fide agents in their distribution to the public (General Electric case). This case is in thorough consonance with the rule laid down in the famous Beech-Nut case, where the court held that a manufacturer may specify the resale price of his goods, and may refuse to deal further with one who fails to maintain those prices, but that he may not go further and through contracts and understandings compel the continued observance of the prices. In other words, where one deals with his own agents, he may control the resale price; but where he deals with independent purchasers, jobbers, wholesalers, and so

on, his only remedy for failure to maintain the set prices is to refuse to sell further to the price-cutter. This is now settled law, although there is pending in Congress a bill to legalize contracts for the maintenance of resale prices.

The supreme court, in United States versus Brims, held that the Sherman act applies to labor combinations as well as combinations of capital, and such combinations may be restrained even though they operate largely on intrastate, as distinguished from interstate, commerce, if the latter is substantially hindered by operation of the combination. It held that a combination to fix prices is unreasonable and violates the antitrust law, even though the prices fixed may in themselves be reasonable at the time fixed, because, as the court pointed out, conditions of competition change rapidly, and what is a reasonable price today may be unreasonable tomorrow (Trenton Potteries case). In United States versus Sisal Sales Corporation it was held that a combination to secure a monopoly of the importation of sisal violated both the Sherman act and the Wilson tariff act.

The Federal Trade Commission was sustained in its contention that the Pacific States Paper Trade Association and others were engaged in illegal practices under the Federal Trade Association and others were engaged in illegal practices under the Federal Trade Commission act when they distributed to their members standard price lists which they were obligated to observe.

In what is popularly referred to as the "Stone Cutters' Case," the supreme court held that the enforcement by a labor union of a rule forbidding its members to handle stone partly fabricated by non-union men, violated the antitrust laws and could be enjoined where the necessary consequence was to curtail the interstate trade in such stone.

In Cline versus Frink Dairy Company, the Colorado anti-trust law was held unconstitutional on account of the vagueness of its provisions, it being a well settled rule of constitutional law that a penal statute must be sufficiently clear that all persons may be apprised in advance of what acts would be criminal under its terms,

In a confiscation case (United States versus One Ford Coupe) it was held that the government might, in a proceeding under section 3450 of the revised statutes dealing with evasions of the internal revenue laws, confiscate the equities of all parties in an automobile seized for transportation of distilled spirits on which no taxes had been paid as required by law, although if the confiscation proceeding were under the Volstead act the equities of innocent third parties would be preserved.

Harrison Act Held Valid

Section one of the Harrison anti-narcotic act, taxing certain drugs and declaring it unlawful to buy or sell them except in or from the original stamped packages, was held valid (Alston versus United States).

The transmission of electric current from one State to another was held by the supreme court to constitute "interstate commerce," just as much as the running of trains across State boundaries, and a State may not impose regulations on the transmission of current in this manner. (Public Utilities Commission of Rhode Island versus Attleboro Steam & Electric Co.)

In Pan-American Petroleum & Transport Company versus United States, the supreme court affirmed the decision of the lower court cancelling the oil leases and contracts with respect to naval petroleum reserve number one in California, and later in Mammoth Oil Company versus United States the court affirmed a similar decision with respect to the Teapot Dome leases.

Price-fixing by statute received a blow in Tyson & Brother versus Banton, District Attorney of New York, in which the supreme court held unconstitutional a statute of that State fixing resale prices of theatre tickets.

The court also held invalid a statute of Minnesota forbidding, under penalty, creameries to purchase cream at higher prices in one locality than in others, allowing for the differences in cost of transportation, saying that such a statute violated the right of private individuals to make private contracts.

A decision was handed down in the famous Claire Furnace case, involving the power of the Federal Trade Commission to compel corporations to submit data relating to costs of production and similar matters, but the case went off on a tangent. It arose upon application of the corporation for an injunction to restrain the commission from compelling such information, and the supreme court held that such a suit would not lie before the attorney-general had been called upon by the commission to compel the corporation to make replies. Until such time, the corporation is in no danger of the infliction of the penalties prescribed by statute, and whether they would be invoked resides in the discretion of the attorney-general.

And in Blodgett versus Holden, handed down just before the Christmas recess, 1927, the court held unconstitutional the gift tax imposed by act of Congress in so far as it applied to gifts made in good faith prior to the passage of the act imposing the tax. It will be recalled that the gift tax act by its terms asserts a conclusive presumption or rule of law that transfers of property made within a certain period are made "in contemplation of death," that is, with intent to defeat the estate tax levy.

ported the commission, and the marketing companies in general confine their activities to the territories assigned them when the combination was dissolved except in some cases where two Standard companies are competing with each other in the same territory. It was disclosed that the number of independent jobbers is rapidly increasing, and that some of the Standard companies sell gasoline to jobbers without restricting their territory of sale, so that the jobbers actually compete with them or with other Standard companies.

Changes in tankwagon prices are set by each Standard company in its operating territory independently of other Standard companies, and the other companies usually follow the Standard price changes, the commission reported. While keen competition exists for volume of sales between Standard and independent companies, price wars were found to be only local and sporadic. Changes in Standard prices are generally announced in advance, the commission told Congress.

The commission commented on, but refrained from expressing an opinion on, the so-called "patent pool" under which a number of large refiners are using the cracking process, a situation which is now before the courts.

Naval Oil Lease Developments

The slow workings of the courts wrote several important chapters during 1927 in the story of the leasing of naval oil reserves, but the close of the year saw some important cases still pending.

The most important events were two decisions of the Supreme Court of the United States finding invalid the leasing of reserve No. 1 in California and of Teapot Dome in Wyoming, and the criminal trial of Harry F. Sinclair, oil magnate, and Albert B. Fall, former secretary of the interior, for conspiracy to defraud the government.

The year opened with indictments against Fall and Sinclair pending in the Supreme Court of the District of Columbia, charging conspiracy in connection with the leasing of the Teapot Dome reserve. Motions to quash the indictments failed, and the case was set for hearing February 2. Due to the illness of Fall it was postponed, and later the government secured two postponements, the later until October 17, so that it might secure as witnesses two former officials of Sinclair's companies, James F. O'Neil and Harry M. Blackmer, both in Europe. During the summer a subpoena was served on Blackmer in Europe, but O'Neil was not located. Blackmer failed to respond to the summons and he was held in contempt of court, his attorneys appealing on the ground that the law permitting service of subpoenas in foreign countries was unconstitutional.

The trial finally opened October 17 before Justice Frederick L. Siddons of the Supreme Court of the District of Columbia. After three weeks of taking testimony the trial abruptly ended when a juror was accused of making public statements indicating that he was prejudiced in favor of the defendants. A mistrial was promptly declared. Government attorneys charged Sinclair, his aids, and the Burns Detective Agency, which he employed, with keeping the jurors under improper surveilance. Sinclair's attorneys countered with similar charges against government agents. A citation for contempt of court in tampering with the jury was brought against Sinclair and his associates, and the year ended with this matter being discussed before the court.

The appeal of Edward L. Doheny from the California court's decision that his lease to reserve No. 1 in California was invalid was pending in the Supreme Court of the United States at the beginning of 1927, and early in the year the court decided to review a similar decision of the Federal court in Wyoming declaring invalid the lease of Sinclair to the Teapot Dome reserve. The California case was decided March 2 and the Wyoming case October 11, and in both cases the supreme court ordered the properties returned to the government. Later, President Coolidge revoked the executive order of President Harding which had transferred to the Department of the Interior jurisdiction over leases of naval oil reserves.

Sinclair had previously been cited for contempt of the senate in refusing to answer questions of its investigating committee. The Supreme Court of the United States denied his petition for review, and January 24 he was arraigned in the Supreme Court of the District of Columbia and pleaded not guilty. He was placed on trial March 7, and on March 16 the jury returned a verdict of guilty. Sinclair's request for a new trial was denied, and on March 31 he was sentenced to pay $500 and serve three months in jail for contempt of the senate. The sentence was suspended pending his appeal of the decision.

Meanwhile there had been pending an indictment against Edward L. Doheny, Edward L. Doheny, Jr., and Albert B. Fall charging them with bribery in connection with a loan of $100,000 to Fall from Doheny at the time Fall as secretary of the interior lease reserve No. 1 to the Doheny interests. The defendants asked the Supreme Court of the District of Columbia to dismiss these charges, but this petition was denied July 6.

Petroleum Investigation by F. T. C.

The investigation of the prices and profits at which petroleum products are handled was completed by the Federal Trade Commission during 1927, and the report was submitted to the senate December 12.

The investigation had been instituted a year and a half earlier by a resolution introduced in the Senate by Senator Park Trammel, of Florida, and included determination of whether recent price advances were arbitrary or unwarranted, whether there were manipulations or agreements among oil companies to control prices, and whether undue profits have been made in petroleum in recent years.

The commission's 300-page report stated that there were no recent evidences of agreements or manipulations of any size among large oil companies to raise or depress prices of crude petroleum or refined products. The only agreement of any size which the commission commented on was an agreement in the Seminole field to restrict production for elimination of waste and protection of profits, an enterprise which was aided by Oklahoma public authorities and approved by the Federal Oil Conservation Board.

The old law of supply and demand still governs the petroleum industry when long periods of time are considered, the commission found, although these conditions were reflected imperfectly in shorter periods partly because crude petroleum prices are set by a few large purchasing companies, among which there is generally little real competition.

Annual Price Movements

Prices of crude petroleum and gasoline were advanced in all parts of the country east of the Rocky Mountains in the last three months of 1921, during January and February in each of the three years 1923, 1924 and 1925, and during the first five months of 1926, the commission reported. In the latter part of each of these five years over-production led to drastic price reductions for both crude petroleum and gasoline. The outstanding factor at the beginning of each of the five years, the report says, seems to have been a general anticipation on the part of leaders of the oil industry, that crude petroleum production and imports in the coming year would be insufficient for domestic refinery requirements, and that the reserves of crude petroleum in storage would not be fed into the market unless current production and imports proved insufficient to supply the demand. Another phenomenon discovered by the commission is that gasoline prices were not advanced or reduced simultaneously in all parts of the country, and that there were wide differences in the extent of such changes.

Instead of uncovering that the petroleum industry is organized to raise prices artificially to the detriment of the consumer, the trade commission's report disclosed that the industry is scourged with price-cutters to such an extent that cries of unfair competition are numerous. The report said:—

> Complaints as to unfair competition are not infrequently encountered, the independent jobbers being more concerned about price cutters in their own ranks. It is admittedly one of the chief functions of the jobbers' associations to keep members from cutting the tank wagon and filling station prices announced by the Standard companies. The Standard companies and the other large companies, when once established in a particular territory, are not complained of much as price cutters.
>
> No important evidences of trusts or monopolies were uncovered by the commission. It was found that stock ownership of petroleum companies is widely diversified and interlocks to an insignificant extent. Only four instances were found of interlocking directorates apt to control any appreciable portion of the industry. Some recent mergers of oil companies reported by the commission were declared to display a completely integrated organization with marketing outlets for refined products and a sufficient supply of crude to keep the organization operating. In only two of such mergers did the commission find that there had resulted any lessening of competition in marketing.

Stock Ownership Diversified

The Standard companies continue to have diversified stock ownership, re-

Oil Conservation Law Advocated

A new policy was adopted by the Federal Oil Conservation Board during 1927. In addition to its economic studies and suggestions for economics in petroleum production and use, the board decided to foster legislation to make possible curtailment of production. As a result of this policy a Committee of Nine was appointed, three representing the government, three representing the oil industry, and three representing lawyers, which is charged with considering conservative legislation.

The Federal Oil Conservation Board is composed ex officio of the Secretary of the Interior, chairman; the Secretary of War, the Secretary of the Navy and the Secretary of Commerce. Previously, the board had contented itself with reporting conditions in the oil industry and recommending remedies for situations which it felt needed attention. It had stressed over-production as the great evil in the industry and called for a better adjustment between production and consumption to prevent waste and to conserve national resources. It had been the position of the board that corrective measures should be taken by the industry, and that any move for new legislation should not initiate with the government.

During the year, however, the board heard rumors that various interests would seek introduction in the next Congress of legislation to enforce conservation. Such a proceeding promised a bitter fight, much confusion in Congress, and the possibility that an unsatisfactory law might be enacted. The belief grew that the board, in its capacity of protecting the national defense and of fostering conservation, and as a friend of the industry should itself be the moving spirit behind any definite move for legislation regarding petroleum conservation.

Need of Legal Advice Declared

The announcement of this policy was made by Hubert Work, Secretary of the Interior and chairman of the Federal Oil Conservation Board, in an address before the annual meeting of the mineral law section of the American Bar Association at Buffalo, N. Y., August 30, 1927. Under the topic "Conservation's Need of Legal Advice," Secretary Work said:—

> If eminent oil men are justified in their diagnosis of this overgrowth of the oil business as malignant, I suggest that calling in of some doctors of laws to treat the sick industry, and it is heroic treatment that seems indicated by the symptoms. Constructive statemanship is plainly needed, and the time is ripe for action. The once great divergence of opinion concerning the necessity for national conservation no longer exists among the leaders of the industry; therefore it behooves the legal profession identified with the oil world to work out a sane and positive course that will protect our national structure in the years to come.
>
> What is needed is not government interfering with business, nor business meddling with government, but government helping industry for its own and the public good. To that end I ask that you contribute to national conservation the legal advice it sorely needs. I believe that the time has arrived when the Federal government should ask Congress for legislation intended to protect our oil deposits against waste in production and the public against future high cost of oil products. Never in our national history was the need for conserving in the ground our petroleum resources more apparent than now.

The constituting of a Committee of Nine, three of the ablest members selected by the American Bar Association, three practical engineers from the oil industry, with three representatives of the Federal government, to draft a bill for the Federal Oil Conservation Board to study and recheck, with a view to its introduction into the Seventieth Congress, would seem desirable. Through such procedure we will have unity of thought, action, and legislation in the interests of the economic production and consumption of our greatest natural resource, which has become the world's dominant factor in the economic, industrial and social life of our modern civilization.

Committee Is Named

This suggestion was accepted by the American Bar Association, which appointed as its members of the Committee of Nine, Henry M. Bates, of the University of Michigan, Ann Arbor; James A. Veasey, of the Carter Oil Company, Tulsa, Okla.; and Warren Olney, jr., of San Francisco.

As representatives of the industry, the American Petroleum Institute

chose three of its former presidents, Thomas A. O'Donnell, of the California Petroleum Company, Los Angeles; J. Edgar Pew, of the Sun Oil Company, Dallas; and W. S. Farish, of the Humble Oil & Refining Company, Houston.

In announcing these appointments, E. W. Clark, president of the Institute, wrote Secretary Work:

I am sure that you will understand that in complying with your request, I cannot undertake to pass up, still less to accede to, any suggestion that the Federal government may directly regulate the production of crude oil in the several States, or that it should attempt to do so. Your purpose, if I read your letter aright, especially in the light of previous statements of the Federal Oil Conservation Board, is to bring about a comprehensive study under the auspices of such a committee as you propose, and I understand that whatever its report may be there will be entire liberty on the part of all concerned to judge the report on its merits without any implication that the appointment of members of the committee will constitute a commitment on any questions of law or of policy involved.

Secretary Work named as representatives of the government, Edward C. Finney, Assistant Secretary of the Interior; Walter F. Brown, Assistant Secretary of Commerce; and Abram F. Myers, Federal Trade Commissioner.

The Committee of Nine met for the first time December 10, and in addressing it Secretary Work said:—

It is the hope of this board that the Committee of Nine now about to function will survey the past, present, and attempt to visualize the future insofar as it relates to petroleum development, physical, economic and legal, and determine upon a constructive program in the interest of practical conservation of the country's oil resources. There are several schools of conflicting thought concerning legislation. Both opponents and proponents of each are leaders in their respective fields and all are entitled to respectful consideration. Whether the Federal government possesses the power to legislate concerning petroleum production; whether the anti-trust laws should be amended; whether State laws should be amended to a definite degree of uniformity—are questions this Committee of Nine will doubtless consider.

If you can devise a substitute for the present legal procedure which now expresses the primitive instincts of the chase, something that is more in keeping with present-day engineering and economic knowledge, business sagacity, financial conservation, our obligation to the public and national responsibility for our future, then you will have performed a task of constructive statesmanship.

The only meeting of the Committee of Nine before the close of the year was held immediately after the address of Secretary Work. It was resolved to invite suggestions from all parties interested in oil conservation, and to hold hearings in Washington early in 1928 to consider written and oral ideas on the subject.

Muscle Shoals Problem in 1927

The beginning of the year 1927 saw Congress confronted with a bewildering maze of proposals for the disposition of the government's war-time activities in power dams and nitrate plants at Muscle Shoals, Alabama. The close of the year brought an indication that time is solving the problem.

The closing days of the congressional session last spring witnessed a deadlock on the Muscle Shoals problem, with various groups of interests holding out for the acceptance of this bid or that, for government operation, for development as a power project, or for the production of fertilizer. Many hearings, investigations and discussions were held, but little progress was made. The opening of the new Congress this winter saw many of the same proposals again advanced, but some leaders in the government, including President Coolidge, the Secretary of Agriculture, and Senator George W. Norris of Nebraska, were convinced that the production of fertilizer at Muscle Shoals is now practically out of the question, and that the matter has narrowed down almost wholly to the proper utilization of the hydro-electric power.

Congress had before it last spring the report of the joint congressional committee, headed by Senator Charles S. Deneen of Illinois, favoring the acceptance of the proposal of the Associated Southern Power Companies. In the senate, Senator Norris, an advocate of government ownership of power resources, won his fight to have this measure referred to the committee on agriculture, where it lay for the remainder of the session. In the house the Deneen report was opposed by Representative Martin Madden of Illinois, who introduced a bill to accept the proposal of the American Cyanamid Company, a plan that had the endorsement of the American Farm Bureau Federation. The House Committee on Military Affairs held extensive hearings on this bill and on a measure introduced by Representative B. Carroll Reece of Tennessee favoring acceptance of the offer of the Farmers' Federated Fertilizer Corporation, and ended by rejecting both bids. The committee suggested that both companies submit offers revised to permit the production of more fertilizer and to protect the government better in the distribution of electric power generated at Muscle Shoals.

Just before adjournment there were introduced in both house and senate several bills to dispose of the Muscle Shoals properties in various ways, including a resolution by Senator Norris for government operation of an experimental fertilizer plant and a resolution by Senator Charles L. McNary of Oregon creating another joint congressional committee to continue study of the problem. On the last day of the session the House Committee on Military Affairs resolved that no offer before it met the requirements for satisfactory disposal of the properties, and that, unless a satisfactory offer was received by the end of the year, Congress should proceed to secure operating contracts for the plants or should form a government corporation to handle them.

During the summer the Muscle Shoals problem lay dormant as far as prospect of government action was concerned. But with the convening of the Seventieth Congress in December it again came to the fore.

Power Project Favored

Shortly before the opening of the session Senator Norris announced that he was convinced that recent developments make the synthetic ammonia process of producing fertilizer far superior to the electric fixation process for which the Muscle Shoals plants were designed some ten years ago, and that it would be poor economy to insist that Muscle Shoals be used for the production of fertilizer except in an experimental way. He drafted a bill authorizing $2,000,000 for putting the Muscle Shoals plants into operation for the sale of electric power by the government, the money to be used for fertilizer research anywhere in the United States, but with nitrate plant No. 1 at Muscle Shoals available for this purpose if found desirable.

That this view is shared by William M. Jardine, Secretary of Agriculture, was revealed in December. The secretary declared that American industry should be encouraged to produce concentrated fertilizer with a nitrate supply, independent of foreign countries, but that recent improvements in nitrogen fixation have made cheap electric power no longer a requisite. He advocated sale of electric power at Muscle Shoals and use of the proceeds for a broad solution of fertilizer problems. This may now be said to be the administration policy, eliminating the feature of government power production, since President Coolidge in his annual message to Congress said:—

The last year has seen considerable changes in the problem of Muscle Shoals. Development of other methods show that nitrates can probably be produced at less cost than by the use of hydro-electric power. Extensive investigation made by the Department of Agriculture indicates that the nitrate plants on this project are of little value for national defense and can probably be disposed of within two years. the oxidation part of the plants, however, should be retained indefinitely. This leaves the project mostly concerned with power. It should, nevertheless, continue to be dedicated to agriculture. It is probable that this desire can be best served by disposing of the plant and applying the revenues received from it to research methods of more economical production of concentrated fertilizer and to demonstrations and other methods of stimulating its use on the farm.

A number of bills relating to Muscle Shoals were introduced in the early days of the present session, embodying many plans for production of fertilizer, for sale of electric power, for government commissions to operate the plants, and for leasing to private corporations. The most prominent of these is the bill by Representative Madden, approving a lease with the Air Nitrate Corporation and the American Cyanamid Company involving the production of definite amounts of concentrated fertilizer. This is a revision along the lines suggested by the House Committee on Military Affairs of the Madden bill of the last Congress which the committee rejected after lengthy hearings.

Guiding Principles Laid Down

Before beginning detailed consideration of any of these bills the House Committee on Military Affairs drew up general principles for its guidance. These were:—

One—That property shall at all times be subject to the absolute right and control of the government for nitrates or other components of munitions of war, and that nitrate plant No. 2 (or its equivalent, or such other nitrogen fixation plant or plants adjacent or near thereto as may be constructed) must be kept available therefor by the purchasers, lessees, or users of the property.

Two—That the purchasers, lessees, or users of the property shall be obligated in the strictest terms to the manufacture and sale to the public of fertilizers in time of peace.

Three—That any proposal for the purchase, lease, or use of the Muscle Shoals property of the United States government must be for the entire property.

These principles are interpreted by the committee as permitting consideration of the plan of Secretary Jardine or Senator Norris for the sale of power and the production elsewhere of fertilizer by the synthetic ammonia process.

A delegation appeared in Washington last Spring claiming that the State, as riparian owner, had an interest in any development of the bed of the Tennessee river at Muscle Shoals other than for interstate navigation, and that any profits to be derived by the Federal government should be shared with the State. The question was put up to the Attorney-General of the United States, who recently submitted to Congress a report of existing laws and court decisions refuting all claim of the State to a share in the Federal government's Muscle Shoals developments.

Trade Leaders Discuss Business

(Continued from page 11)

months, have been heavily reduced by distilling demand, and the next United States official figures on bond stocks in this market will undoubtedly show a heavy decrease. London, which usually operates or speculates heavily in this spice, has been too busy in pepper to give attention to cloves, but it would seem that any market developments would be on a higher price basis on this spice.

Gingers showed a mixed picture. The African grade was rather heavily sold at the beginning of the season, last spring, with the resultant decline. This was overcome later in the year by an oversold position, which had to be covered, resulting in an advance of about 33⅓ percent. Cochins likewise declined owing to importations being in excess of commodity needs, although the end of the year showed stocks practically used up, with advanced prices and an absence of some desirable qualities. Jamaicas were bought heavily by London operators, which resulted in an important price advance, which did not, however, receive a sympathetic movement on this market, so that consumption of this grade has decreased in this country.

Pimento was fairly steady through the year and closed just slightly lower than a year ago.

Cassias, particularly Batavias, showed a sharp advance due to heavy commitments on the part of American dealers. The production of the D. E. I. grades shows a material decline compared with former years, particularly of the better grades, but no sympathetic price increase is in evidence and quotations are back nearly to the point from which they started to advance. China grades have been in excessive supply, although new imports are now neglected, due to the cost of importation being greater than the New York market.

Ceylon cinnamon remained high throughout the year, owing to decreased production, caused by the substitution of rubber, etc. The supply for export has been sufficient to maintain the present high price, and no developments are apparent inasfar as the future is concerned.

Nutmegs and mace declined during the year, due to fairly liberal supplies of the West India growth, which has materially improved in quality in the past few years. Holland operators, who had been mainly accountable for the advance, have withheld support, so that the articles have declined to their present levels, which seem to be satisfactory to grinders, who are taking all grades in fairly liberal quantities. The difficulty of importing the East India grades caused by the failure of a number of importations to pass the requirements set up by the pure food authorities have caused heavy losses by shippers and importers, and it seems rather peculiar that the East India grades, preferred so much on account of their superior flavor over the West India growth, should show a predominance of faults disfavored by the pure food authorities.

The policy of "hand-to-mouth" buying has been an important factor in preventing sharp speculative changes, and this method of filling requirements seems still to be in favor with the grinders and manufacturers. The effect will be a steady demand throughout the winter, which will serve to stabilize the volume of imports and the trend of prices, insofar as the consumption of this country affects the articles.

C. M. Baker

(Pond's Extract Company, New York)

President, American Manufacturers of Toilet Articles

We understand that the year 1927 was a satisfactory one for American manufacturers of toilet articles, particularly those who advertised consistently and intelligently.

There is no question but that the toilet article industry is becoming of much greater importance each year. Merchants are devoting more space and more important space to their display, and the public, a large part of which a few years ago considered toilet articles a luxury, now considers them a necessity.

Nineteen hundred and twenty-eight should be fully as good a year for our industry as last year. There is no question but that American-made toilet specialties are superior to those made in any other country. Manufacturers here who are not taking advantage of the fact that human nature is the same all over the world and are not, on account of this fact, developing their businesses through advertising and otherwise in foreign markets, are overlooking excellent opportunities for expansion.

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Business Activity, Sentiment, and Progress in 1927 as a Guide to 1928

(Continued from page 3)

the large inventories, which this development has made unnecessary, were still essential to continuous manufacturing operations, the unprofitableness of the prosperity prevailing in 1927 would be a much more serious condition.

Agriculture fared somewhat better in 1927 than it had in the preceding year. The improvement, however, was not so gratifying to agriculturists as to make them fully contented with their lot. In part, the improvement was an actuality only when agriculture or, at least, a major division thereof, as whole was used as the basis of comparison. Better conditions in certain lines, for example, cotton, owed their existence to the fact that crop losses in one section enabled other sections to get better prices by reason of a reduced total supply. So it was that the cotton crop, almost one-third smaller than that in 1926, had a unit value about 80 percent greater at December 1. Gross production of the seventeen principal crops was 2.2 less than that in 1926. The total value of crops of about fifty products, on the basis of prices at December 1, was almost eight and one-half billion dollars, an increase of about 8 percent over the corresponding figure for 1926. As the average calculated by the government for the cost of living decreased more than 2 percent during the year, and as prices in general (retail not so markedly as wholesale) declined, the purchasing power of farm products was increased about one-eighth in 1927.

The increased unit value of cotton was clearly attributable to a more stimulative ratio between supply and demand. The increase of 12.5 percent in the unit value of corn in the face of a larger crop is not so easily explained. As the visible supply of this grain was about one-fifth smaller at the end of 1927 than it had been a year earlier, it would seem to be reasonable to attribute the increase in value to an extraordinarily good demand. Wheat offers a more perplexing problem. The 1927 crop was about 5 percent larger than that in the preceding year. The price at December 1 was about 7 percent lower than a year earlier. The visible supply at the end of the year showed an increase of more than one-third. It may be readily understood why wheat farmers withheld their grain from the market in several of the more important producing sections. It is not so easy to understand why they had to until it is learned that the 1927 production of wheat in forty countries was 3.6 percent larger than that in 1926, while the corn crop in the eighteen principal producing countries showed a decline of 3.2 percent. Agriculture, as much as, if not more than, manufacturing industry, must reckon its markets without regard for the limitations of national boundaries.

Some approach toward a realization of this fact is evidenced by the movement launched or, at least, fostered by the National Grange, which has for its object the furtherance of export trade in agricultural products by means of government debentures. Industry, as a general rule, must take what it can get for its goods in foreign markets, and be grateful for the privilege of exemption from the anti-trust laws in combining to export cheaply. Agriculture, under the debenture plan, is offered the full price of its goods if it will apply the difference between that and the price obtainable abroad to the payment of the duty on imported materials. Industry might well study the benefits to be derived by it from this idea of foreign trade; although these benefits, in view of the different lights in which industry and agriculture are held by politicians when a question of price-fixing or one of controlling output arises, would seem to lie solely in the possibility of purchasing agricultural debenture certificates at a discount.

Cause and effect were reversed in the case of the iron and steel industry from their relative positions with respect to agriculture. The influential factor in the basic manufacturing industry is demand rather than production. Last year its influence was depressing. Prices were reduced rather steadily over the greater part of the year, although they began to stiffen in the last few weeks. As a result of this, the productive operations of the industry were somewhat curtailed; so that the output of pig iron in 1927 was about 5 percent less than that in 1926, and the output of steel about 8 percent less. The reason for the fundamental weakness is to be found in the fact that world production of steel was about 7 percent greater than in 1926, and that of pig iron about 8 percent greater. The domestic industry seemed to be entering upon a period of greater brightness at the turn of the year, a result of increased activity in heavier construction lines. On the whole, construction was a little behind the high mark set in 1926, but the difference in work which is reflected in conditions in the iron and steel industry was considerable.

The reason why industry has not had its warranted share in the profits of the prosperity prevailing in the United States during 1927 is declared by many capable observers of economic trends to lie in the use of an inordinate proportion of the liquid assets of the country for speculative purposes. It is the modern theory of economics that prosperity should be measured in terms of its current application to a whole people, rather than on the basis of its long-term effects in the main. This theory presupposes the possibility of maintaining production at a steady and gradually increasing rate of operation. The necessary supplement to the inadequate purchasing power of industrial earnings which, under the older theory, leave the margin of overhead to be made up periodically by radically curtailed productive activity, is found under the newer economy in capital income and compensation derived from public works. But, the beneficent ratio between productive income and its supplement, it is declared, does

(Continued on page 106)

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56-Year Record of Exports from the United States, 1871-1927

The following tables, compiled from official records, give export data, quantity and value, for fiscal* years to June 30, for all years for which figures are available, down to 1927:

*Figures for 1923 and 1924 revised in 1926 issue from calendar year records previously given

Absorbent Cotton, Gauze, and Surgical Dressings

	Pounds.	Dollars.
1925	2,965,413	2,093,420
1926	3,013,678	2,243,161
1927	3,204,898	2,226,210

Abrasives, Artificial, Steel Wool, Abrasive Paper, Etc.

	Pounds.	Dollars.
1922	**7,198,459**	**1,519,303**
1923	19,744,356	3,298,195
1924	19,003,877	4,346,331
1925	23,903,264	5,098,462

Not stated after 1925.

Abrasives, Wheels, Emery and Corundum

	Pounds.	Dollars.
1891	.....	34,651
1901	.....	172,766
1915	.....	736,879
1916	.....	1,630,265
1917	.....	3,846,101
1918	.....	4,697,443
1919	.....	3,323,219
1920	.....	2,546,991
1921	.....	2,439,021
1922	**2,050,502**	**644,151**
1923	1,766,654	580,772
1924	1,696,268	569,348
1925	1,531,754	495,247
1926	1,001,291	329,253
1927	727,001	239,732

Acid, Acetic

	Pounds.	Dollars.
1922	**5,079,880**	**367,365**
1923	3,633,767	290,081
1924	486,674	64,666
1925	879,288	90,536
1926	447,605	55,869

Not stated after 1926.

Acid, Boric

	Pounds.	Dollars.
1922	**1,560,996**	**189,581**
1923	1,245,960	149,950
1924	728,849	82,245
1925	762,144	78,735
1926	1,119,964	105,169

Not stated after 1926.

Acid, Carbolic

	Pounds.	Dollars.
1918	**8,688,554**	**4,236,288**
1919	**5,810,314**	**2,173,171**
1920	**2,223,205**	**420,101**
1921	659,890	86,297
1922	111,479	19,008
1923	**232,830**	**84,389**
1924	51,364	8,016

Not stated after 1924.

Acid, Nitric

	Pounds.	Dollars.
1918	**961,494**	**101,040**
1919	**737,273**	**86,788**
1920	**820,517**	**105,882**
1921	**267,119**	**48,552**
1922	**234,736**	**27,587**

Not stated after 1922.

Acid, Picric

	Pounds.	Dollars.
1918	**53,688,240**	**33,902,957**
1919	**12,507,483**	**6,565,473**
1920	8,073	3,430
1921	3,730	2,142
1922	466	288

Not stated after 1922.

Acid, Stearic

	Pounds.	Dollars.
1923	3,686,425	404,179
1924	2,191,052	281,313
1925	2,059,307	277,476
1926	1,108,252	168,016
1927	1,847,507	199,419

Acid, Sulphuric

	Pounds.	Dollars.
1913	9,790,532	89,783
1914	12,131,750	125,892
1915	46,771,510	516,436
1916	82,020,246	1,990,532
1917	58,604,048	963,888
1918	67,654,722	1,119,907
1919	47,413,636	805,430
1920	32,334,393	778,287
1921	18,600,704	446,380
1922	**13,979,319**	**265,560**
1923	7,261,052	156,204
1924	10,364,010	184,335
1925	10,274,662	173,129
1926	8,244,765	158,062
1927	7,932,630	167,833

Acids and Anhydrides, All Other

	Pounds.	Dollars.
1871	.....	57,730
1881	.....	39,240
1891	.....	121,851
1901	.....	198,233
1913	.....	364,347
1914	.....	357,035
1915	.....	2,611,741
1916	.....	22,717,335
1917	.....	54,725,124
1918	.....	5,673,707
1919	.....	4,573,969
1920	.....	5,297,987
1921	.....	3,029,332
1922	.....	1,019,371
1922	**10,393,865**	**639,500**
1923	11,391,034	704,207
1924	9,914,912	661,298
1925	12,491,377	615,292
1926	15,457,187	701,012
1927	14,829,711	764,312

Alcohol, Methyl

(See Methanol)

Alcohol, Other, Pure and Denatured

	Gallons.	Dollars
1891	418,935	180,290
1901	237,509	97,633
1913	151,232	58,346
1914	187,845	67,728
1915	200,455	108,985
1916	24,433,243	8,784,742
1917	51,941,634	16,027,867
1918	8,351,142	4,619,878
1919	11,884,383	6,145,115
1920	27,376,167	10,455,247
1921	14,635,394	7,569,881
1922	3,180,013	943,774
1923	**404,837**	**170,455**
1924	312,187	213,298
1925	380,959	296,057
1926	473,412	291,016
1927	389,298	405,750

Aluminum Ingots, Scrap and Alloys

	Pounds.	Dollars.
1918	21,207,641	8,611,447
1919	11,363,094	4,194,099
1920	7,834,746	2,330,073
1921	1,989,569	614,142
1922	1,442,580	282,084
1923	603,377	114,771
1924	1,533,943	317,968
1925	8,880,379	1,984,675
1926	2,296,122	511,867
1927	979,145	197,388

Aluminum Sulphate

	Pounds.	Dollars.
1922	26,450,657	388,447
1923	31,692,879	466,810
1924	33,867,103	442,372
1925	35,737,542	437,950
1926	43,732,392	530,966
1927	43,124,766	508,236

Ammonia and Compounds

(See also "Fertilizers")

	Pounds.	Dollars.
1922	2,747,480	990,111
1923	8,397,796	1,025,925
1924	3,440,966	899,166
1925	3,880,969	913,476
1926	4,668,381	741,389
1927	4,807,777	613,271

Anilin Oils and Salts

	Pounds.	Dollars.
1922	341,220	65,602
1923	492,087	88,248
1924	262,799	68,970
1925	634,647	133,920
1926	478,737	93,427

Not stated after 1926.

Antitoxins, Serums and Vaccines

		Dollars.
1924	.....	843,588
1925	.....	1,057,124
1926	.....	1,417,564
1926	.....	1,417,564
1927	.....	1,612,466

Asbestos, Unmanufactured

	Tons.	Dollars.
1917	219	21,851
1918	767	117,413
1919	520	58,448
1920	1,079	223,560
1921	711	139,918
1922	329	43,302
1923	185	24,219
1924	1,163	73,580
1925	883	87,576
1926	1,000	76,218
1927	683	60,996

Ashes, Pot and Pearl

	Pounds.	Dollars.
1871	1,474,954	103,249
1881	1,636,839	141,463
1891	430,582	24,432
1901	1,043,817	56,072

Stated as "Potash, All Other," for later years.

Asphalt and Bitumen, Unmanufactured

	Tons.	Dollars.
1914	49,831	1,131,086
1915	28,553	616,240
1916	42,754	830,946
1917	34,423	712,051
1918	22,065	548,745
1919	22,754	729,662
1920	47,024	1,386,770
1921	43,630	1,290,467
1922	43,002	1,183,080
1923	66,004	1,588,001
1924	50,639	1,270,916
1925	36,866	988,946
1926	34,370	940,170
1927	40,758	1,157,090

Asphalt and Bitumen, Manufactures, Except Roofing

	Pounds.	Dollars.
1914	.....	362,347
1915	.....	400,154
1916	.....	510,290
1917	.....	554,065
1918	.....	489,038
1919	.....	673,231
1920	.....	682,753
1921	.....	781,947
1922	29,514,018	390,925
1923	43,664,167	633,379
1924	66,050,928	1,112,974
1925	90,155,525	1,506,798
1926	67,049,651	1,204,546
1927	55,487,665	1,193,613

Baking Powder

	Pounds.	Dollars.
1901	822,540	292,081
1914	2,725,964	790,274
1915	3,376,780	881,879
1916	3,969,985	860,118
1917	4,836,844	1,028,352
1918	6,022,402	1,838,808
1919	4,257,487	1,257,805
1920	5,595,126	1,648,906
1921	3,491,666	1,229,400
1922	3,612,397	1,496,446
1923	4,061,789	1,773,005
1924	3,930,204	1,622,749
1925	4,274,684	1,628,120
1926	4,084,663	1,500,125
1927	4,790,031	1,791,860

Bauxite and Other Aluminum Ores and Concentrates

	Tons.	Dollars.
1915	11,949	531,404
1916	19,317	929,309
1917	18,495	1,118,777
1918	21,313	1,463,842
1919	18,187	1,397,200
1920	20,690	1,709,390
1921	13,081	1,066,732
1922	19,617	961,208
1923	49,234	2,312,344
1924	81,833	3,765,069
1925	78,286	4,042,557
1926	81,877	4,142,048
1927	107,930	6,742,126

Beeswax

	Pounds.	Dollars.
1881	164,090	40,203
1891	120,548	30,027
1901	140,276	39,464
1914	96,215	27,292
1915	181,328	57,971
1916	147,772	48,252
1917	383,667	131,691
1918	189,871	68,117
1919	134,508	67,237
1920	641,357	287,051
1921	189,616	80,497
1922	**100,674**	**27,699**
1923	79,404	25,187
1924	136,080	42,311

Not stated after 1924.

Benzol

(See "Coal Tar Distillates.")

Blacking and Polishes, Shoe Polishes

	Pounds.	Dollars.
1922	5,173,840	1,188,552
1923	5,709,705	1,279,923
1924	5,647,717	1,312,066
1925	5,439,708	1,270,834
1926	4,140,347	1,157,845
1927	3,253,603	902,552

Blacking and Polishes, All Other

	Pounds.	Dollars.
1915	.....	503,629
1916	.....	784,552
1917	.....	1,036,234
1918	.....	1,009,100
1919	.....	2,077,319
1920	.....	2,845,110
1921	.....	2,072,963
1922	3,913,206	567,932
1923	3,270,605	468,438
1924	2,537,564	471,916
1925	2,515,106	496,495
1926	2,816,984	527,095
1927	3,689,580	668,601

Bleaching Powder

(See "Lime, Chlorinated")

Bones, Hoofs, and Horns, Unmanufactured

	Pounds.	Dollars.
1871	.....	55,629
1881	.....	73,807
1891	.....	335,710
1901	.....	218,680
1913	.....	102,705
1914	.....	61,180
1915	.....	16,182
1916	.....	37,558
1917	.....	39,804
1918	.....	338,642
1919	.....	330,677
1920	.....	374,136
1921	.....	118,021
1922	5,297,306	261,292
1923	6,300,654	310,152
1924	5,457,207	285,664
1925	4,188,698	152,236
1926	2,509,345	103,228
1927	1,974,935	79,766

Bone Black

	Pounds.	Dollars.
1922	2,056,593	117,014
1923	2,398,913	147,049
1924	2,914,963	173,901
1925	2,892,136	177,479

Not separately stated after 1925.

Bone Black and Lampblack

	Pounds.	Dollars.
1926	3,194,613	225,737
1927	3,327,498	225,351

Borax

	Pounds.	Dollars.
1920	10,943,110	905,617
1921	4,368,880	385,650
1922	10,094,724	545,601
1923	32,400,617	1,375,387
1924	36,475,490	1,611,258
1925	32,527,339	1,482,570
1926	33,277,473	1,519,740
1927	40,772,138	1,509,642

Brushes, Toilet

	*Dozen.	Dollars.
1922	1,143,457	280,362
1923	1,319,516	330,266
1924	2,074,007	458,542
1925	3,199,425	683,371
1926	3,080,797	696,321
1927	258,423	707,316

* Quantity stated as "Number" prior to 1927.

Brushes, Paint

	*Dozen.	Dollars.
1922	404,767	133,924
1923	629,472	182,428
1924	664,338	228,071
1925	772,234	256,834
1926	814,140	243,304
1927	57,302	191,148

* Quantity stated as "Number" prior to 1927.

Brushes, Other

	*Dozen.	Dollars.
1915	.....	604,916
1916	.....	1,132,262
1917	.....	863,630
1918	.....	984,085
1919	.....	1,324,367
1920	.....	1,710,678
1921	.....	1,878,901
1922	2,108,151	299,498
1923	2,223,871	343,697
1924	1,933,457	296,046
1925	1,829,933	326,818
1926	2,027,072	375,703
1927	208,680	399,738

* Quantity stated as "Number" prior to 1927.

Calcium Carbide

	Pounds.	Dollars.
1913	33,419,375	990,027
1914	32,845,649	962,040
1915	35,772,867	1,097,952
1916	37,873,692	1,211,267
1917	31,278,971	1,001,861
1918	28,814,176	1,327,864
1919	21,278,167	1,537,984
1920	21,164,404	1,040,754
1921	20,147,753	967,024
1922	12,477,237	629,164
1923	8,551,989	403,428
1924	11,127,322	517,037
1925	6,334,563	271,876
1926	4,466,966	186,649
1927	4,521,361	188,375

Carbon Black

	Pounds.	Dollars.
1926	41,008,366	3,651,704
1927	47,377,747	4,077,415

Candles

	Pounds.	Dollars.
1871	2,321,959	348,368
1881	1,780,572	210,842
1891	1,546,079	149,112
1901	2,432,815	236,547
1913	2,595,912	246,274
1914	3,047,756	283,018
1915	4,230,026	417,345
1916	6,120,695	575,650
1917	6,576,632	749,369
1918	5,530,017	900,514
1919	9,305,651	1,901,536
1920	7,691,420	1,494,616
1921	3,252,838	708,149
1922	2,161,076	322,491
1923	2,449,163	311,862
1924	1,597,054	239,057
1925	1,329,192	234,677
1926	1,324,601	254,929
1927	1,132,256	244,832

Cement, Hydraulic

	Barrels (380 lbs.).	Dollars.
1901	218,240	438,915
1914	2,391,453	2,382,282
1915	2,361,451	3,241,686
1916	2,740,596	3,780,564
1917	2,345,952	4,111,550
1918	2,575,126	5,896,905
1919	1,938,223	5,871,902
1920	3,179,549	9,599,384
1921	2,023,167	7,700,081
1922	1,018,769	3,100,459
1923	1,127,460	3,274,073
1924	962,158	2,770,201
1925	829,542	2,514,423
1926	1,051,843	3,081,975
1927	918,377	3,010,007

Chalk Manufactures

	Pounds.	Dollars.
1914	.....	40,154
1915	.....	51,175
1916	.....	60,417
1917	.....	105,202
1918	.....	186,711
1919	.....	273,741
1920	.....	373,206
1921	.....	467,993
1922	.....	199,649
1922	1,272,354	209,018
1923	1,225,340	150,679
1923	1,253,329	171,656
1924	1,134,508	133,057
1925	1,334,169	172,452
1926	1,630,880	241,174
1927	1,863,526	221,793

Chewing Gum

	Pounds.	Dollars.
1901	.....	11,686
1914	.....	178,630
1915	.....	281,433
1916	.....	574,423
1917	.....	1,084,732
1918	.....	1,896,135
1919	.....	1,794,880
1920	.....	2,617,483
1921	.....	1,510,679
1922	1,911,892	892,380
1923	2,474,685	1,185,016
1924	2,899,414	1,358,362
1925	3,762,784	1,675,106
1926	5,035,375	2,198,229
1927	4,604,134	1,935,262

Clays, Fire Clay

	Tons.	Dollars.
1871	.....	10,904
1881	.....	156
1891	.....	.....
1901	.....	2,330
1917	44,098	201,398
1918	50,529	310,527
1919	44,002	296,108
1920	32,076	257,443
1921	45,574	387,926
1922	19,241	131,910
1923	32,781	237,239
1924	44,133	328,258
1925	34,407	315,422
1926	44,733	356,295
1927	42,353	373,811

Clays, All Other

	Tons.	Dollars.
1871	.....	.....
1881	.....	8,762
1891	.....	26,857
1901	.....	146,131
1917	26,078	169,544
1918	22,293	189,146
1919	23,752	196,943
1920	40,562	440,874
1921	45,505	583,998
1922	17,315	185,714
1923	29,083	307,587
1924	27,711	392,995
1925	32,227	507,328
1926	33,261	518,590
1927	44,852	727,583

Exports from the United States

Coal Tar and Pitch

	Barrels. (280 lbs.)	Dollars.
1913	121,168	152,273
1914	22,150	43,145
1915	21,317	39,647
1916	74,809	129,220
1917	62,674	145,574
1918	53,955	147,765
1919	60,672	201,653
1920	81,640	192,294
1921	128,103	287,300
1922	76,653	159,078
1923	389,183	1,186,845
1924	466,274	1,581,930
1925	95,319	283,914
1926	90,980	290,730
1927	740,834	3,633,792

Coal Tar Colors, Dyes and Stains

	Pounds.	Dollars.
1922	8,352,437	4,001,145
1923	13,935,567	5,011,825
1924	17,105,265	5,407,652
1925	20,683,472	6,591,543
1925	20,682,072	6,591,747
1926	25,101,464	6,042,748
1927	26,605,229	5,829,412

Coal Tar Distillate, Benzol

	*Gallons.	Dollars.
1918	25,400,852	2,152,315
1919	24,402,278	1,236,282
1920	17,253,314	732,836
1921	66,622,862	3,182,721
1922	55,179,363	1,978,776
1923	78,727,250	2,715,609
1924	100,384,912	3,101,983
1925	39,798,083	1,166,374
1925	48,744,643	1,309,646
1926	61,573,213	2,374,753
1927	29,434,714	8,041,548

* Quantity stated as Pounds prior to 1927.

Coal Tar Distillates, Other Crude

	Pounds.	Dollars.
1918	.....	5,020,851
1919	.....	3,748,370
1920	.....	3,618,424
1921	.....	4,101,129
1922	5,289,029	154,983
1923	8,160,098	236,405
1924	10,159,483	367,108
1925	16,652,904	483,801
1926	24,919,275	783,740
1927	21,093,192	525,809

Coal Tar Intermediates N. E. S.

	Pounds.	Dollars.
1923	1,371,649	273,628
1924	1,802,689	302,710
1925	1,854,442	294,493
1926	1,240,567	250,847
1927	2,459,529	432,270

Coal Tar Medicinals

	Pounds.	Dollars.
1891	.....	1,880,728
1901	.....	3,440,177
1913	.....	7,110,493
1914	.....	6,721,978
1915	.....	7,130,379
1916	.....	8,397,971
1917	.....	8,613,202
1918	.....	10,190,188
1919	.....	15,277,037
1920	.....	20,124,561
1921	.....	18,038,328
1922	554,166	224,546
1923	217,784	138,526
1924	247,562	233,817
1925	504,127	410,257
1926	658,831	409,764
1927	885,729	378,295

Coal Tar Photographic Chemicals

	Pounds.	Dollars.
1922	248,119	103,853
1923	216,011	94,285
1924	183,075	96,661
1925	229,473	81,523
1926	415,128	119,951

Not stated after 1926.

Copper Ores, Concentrates and Unrefined Copper

	Pounds.	Dollars.
1916	4,921,089	1,137,770
1917	18,200,897	5,500,818
1918	26,550,026	6,920,687
1919	1,774,844	483,590
1920	2,929,227	555,615
1921	371,096	85,361
1922	295,935	34,873
1923	260,196	36,111
1924	295,278	50,125
1925	1,401,161	200,408
1926	2,662,245	269,690
1927	6,987,252	702,862

Copper Sulphate (Blue Vitriol)

	Pounds.	Dollars.
1901	49,223,183	2,324,738
1913	5,052,680	262,561
1914	7,375,775	330,007
1915	10,238,808	445,580
1916	17,978,242	2,469,437
1917	28,128,190	3,012,954
1918	15,164,078	1,431,262
1919	13,223,923	1,339,945
1920	4,511,284	373,834
1921	4,297,378	297,395
1922	4,809,948	227,019
1923	2,535,137	145,305
1924	2,507,827	124,417
1925	4,219,538	199,531
1926	5,760,988	276,238
1927	5,102,717	259,644

Cork, Crown Bottle Caps

	Gross.	Dollars.
1925	3,953,435	825,213
1926	4,272,257	870,004
1927	3,839,889	813,135

Cork Disks, Washers and Wafers

	Gross.	Dollars.
1922	.....	109,432
1923	2,364,279	131,316
1924	2,573,944	134,282
1925	4,030,787	171,338
1926	5,706,411	203,854
1927	5,686,807	194,635

Cork Stoppers

	Pounds.	Dollars.
1922	300,935	123,420
1923	325,247	121,416
1924	467,729	140,418
1925	94,645	59,288
1926	202,803	80,482
1927	192,897	92,739

Cork, Other Manufactures of

	Pounds.	Dollars.
1891	.....	7,103
1901	.....	36,717
1913	.....	330,436
1914	.....	.....
1915	.....	211,795
1916	.....	455,424
1917	.....	541,579
1918	.....	847,377
1919	.....	1,150,524
1920	.....	1,140,517
1921	.....	1,757,636
1923	1,611,935	238,494
1924	2,389,261	318,611
1925	2,205,153	280,921
1926	3,093,591	421,606
1927	16,880,430	497,599

Creams, Rouges and Other Cosmetics

	Pounds.	Dollars.
1922	2,071,263	966,133
1923	2,077,398	1,032,439
1924	2,355,842	1,213,569
1925	2,179,696	1,140,623
1926	2,601,639	1,441,338
1927	3,046,879	1,745,276

Crucibles, Clay and Graphite

	Number.	Dollars.
1922	355,155	92,273
1923	370,895	100,331
1924	489,087	120,679
1925	523,135	99,210
1926	463,589	112,357
1927	693,616	139,308

Dentifrices

	Pounds.	Dollars.
1922	4,026,935	2,403,497
1923	3,946,642	2,540,388
1924	2,600,841	2,430,508
1925	3,404,629	3,098,672
1926	2,045,387	1,876,510
1927	3,556,956	3,172,535

Dextrin, or British Gum

	Pounds.	Dollars.
1922	16,241,674	536,027
1923	17,327,297	619,258
1924	20,133,355	795,583
1925	21,076,367	929,149
1926	21,458,176	949,040
1927	23,825,138	978,087

Distilled Liquors

	Pf. Gallons.	Dollars.
1925	126,302	121,722
1926	212,455	161,118
1927	176,983	84,158

Drugs, Vegetable, Crude, N. E. S.

	Pounds.	Dollars.
1901	.....	275,150
1913	.....	424,312
1914	.....	513,071
1915	.....	470,090
1916	.....	768,977
1917	.....	852,256
1918	.....	784,514
1919	.....	1,133,855
1920	.....	1,703,064
1921	.....	836,320
1922	3,919,912	878,636
1923	4,235,463	969,861
1924	6,085,687	1,394,113
1925	7,944,567	1,681,474
1926	5,136,427	1,085,328
1927	4,841,209	936,056

Druggists' Rubber Sundries

		Dollars.
1918	.....	884,245
1919	.....	1,019,170
1920	.....	1,530,326
1921	.....	1,512,852
1922	.....	871,465
1923	.....	813,365
1924	.....	745,490
1925	.....	882,521
1926	.....	971,987
1927	.....	407,578

Dyes and Dyestuffs

		Dollars.
1871	.....	655,115
1881	.....	626,749
1891	.....	660,590
1901	.....	394,278
1913	.....	347,656
1914	.....	356,919
1915	.....	1,775,925
1916	.....	5,102,002
1917	.....	11,710,887

Stated separately after 1917; see following classes.

Dyeing and Tanning Materials, Crude

	Tons.	Dollars.
1923	840	74,017
1924	1,657	105,542
1925	5,897	137,349
1926	4,298	78,509
1927	1,538	77,717

Dye Extracts, Logwood

	Pounds.	Dollars.
1918	.....	2,339,480
1919	.....	1,556,023
1920	.....	1,832,231
1921	.....	1,471,040
1922	2,626,103	448,713
1923	2,436,946	364,787
1924	1,336,232	180,720
1925	1,987,168	243,521
1926	1,928,186	209,521
1927	2,407,570	236,870

Dye Extracts, All Other

	Pounds.	Dollars.
1918	.....	7,284,110
1919	.....	6,125,394
1920	.....	6,829,937
1921	.....	3,571,309
1922	2,614,110	459,861
1923	2,776,378	393,815
1924	1,649,951	234,820
1925	1,342,439	162,021
1926	1,184,530	126,889
1927	966,442	144,603

Dynamite

	Pounds.	Dollars.
1915	7,712,999	924,079
1916	19,561,654	3,656,653
1917	16,254,201	3,488,143
1918	18,911,668	4,991,508
1919	13,525,096	3,190,447
1920	12,566,057	2,519,512
1921	11,878,600	2,451,856
1922	12,312,575	2,254,690
1923	17,446,779	2,645,649
1924	15,765,626	2,990,866
1925	15,411,715	2,247,259
1926	17,087,555	2,453,255
1927	14,104,901	2,037,538

Eggs in the Shell

	Doz.	Dollars.
1871	5,017	1,428
1881	80,146	13,776
1891	363,116	64,259
1901	3,692,875	676,232
1918	18,969,167	7,167,134
1919	28,384,783	12,444,345
1920	38,326,986	19,149,536
1921	26,960,098	11,251,081
1922	34,620,050	9,094,018
1923	34,283,515	9,311,157
1924	32,831,528	8,659,198
1925	25,106,741	7,300,263
1926	27,930,637	8,169,266
1927	27,982,022	7,840,234

Eggs and Yolks, Frozen, Dried or Canned

	Pounds.	Dollars.
1901	.....	1,610
1913	.....	67,854
1914	.....	47,968
1915	.....	88,865
1916	.....	210,255
1917	.....	72,491
1918	.....	525,880
1919	.....	341,304
1920	.....	282,198
1921	.....	201,832
1922	.....	130,944
1923	555,227	88,870
1924	488,095	74,918
1925	270,036	36,903
1926	425,595	66,648
1927	456,573	60,519

Fertilizers, Ammonia Sulphate

	Tons.	Dollars
1920	17,480	2,264,387
1921	65,915	7,620,130
1922	168,077	8,720,775
1923	144,645	9,805,417
1924	130,902	8,918,536
1925	103,282	5,654,682
1926	143,666	7,989,058
1927	195,706	10,157,340

Fertilizers, Guano

	Tons.	Dollars.
1871	1,203	35,000
1881	959	29,581

Not stated for later years.

Fertilizers, Nitrogenous Materials, N. E. S.

	Tons.	Dollars.
1923	10,805	466,229
1924	5,749	339,426
1925	6,114	340,706
1926	6,298	338,834
1927	9,324	572,823

Fertilizers, Phosphates, Crude

	Tons.	Dollars.
1901	624,966	5,048,393

Stated separately for later years.

Fertilizers, Phosphate High-Grade Hard Rock

	Tons.	Dollars.
1913	494,200	4,942,000
1914	475,335	4,753,350
1915	46,050	460,050
1916	44,330	429,130
1917	14,963	150,505
1918	24,047	174,373
1919	80,834	715,104
1920	351,352	3,884,147
1921	274,953	4,087,512
1922	202,694	2,687,405
1923	183,015	2,236,748
1924	160,072	2,015,567
1925	161,064	2,132,142
1926	133,219	1,960,508
1927	123,260	901,099

Fertilizers, Phosphate Rock, Land Pebble

	Tons.	Dollars.
1913	777,898	4,577,962
1914	1,000,630	5,857,969
1915	222,472	1,276,759
1916	255,206	1,324,877
1917	178,094	705,251
1918	110,909	456,383
1919	78,027	448,855
1920	395,581	2,991,371
1921	651,749	5,684,516
1922	516,635	3,708,250
1923	558,217	3,265,721
1924	660,447	3,301,329
1925	652,969	3,170,723
1926	730,805	3,466,610

Not stated separately after 1926.

Fertilizers, Phosphate Rock, All Other

	Tons	Dollars.
1913	794	4,127
1914	1,906	6,516
1915	887	5,888
1916	350	3,058
1917	8,108	255,389
1918	22,623	198,778
1919	30,026	308,653
1920	30,300	419,667
1921	16,862	277,747
1922	6,571	78,847
1923	2,278	24,116
1924	4,936	36,667
1925	16,602	132,743
1926	12,080	90,720

Not stated separately after 1926.

Fertilizers, Phosphate Rock, Land Pebble and Other Fertilizers,

	Tons.	Dollars.
1927	659,440	3,293,490

Fertilizers, Prepared Mixtures

	Tons.	Dollars.
1922	14,416	690,972
1923	14,036	601,870
1924	34,129	1,650,391
1925	26,945	1,294,124
1926	31,921	1,387,068
1927	15,877	675,990

Fertilizers, Superphosphates (Acid Phosphates)

	Tons.	Dollars.
1917	6,508	67,489
1918	6,155	202,268
1919	51,405	1,548,198
1920	93,432	3,099,855
1921	29,954	1,311,054
1922	14,806	267,739
1923	32,326	404,869
1924	50,285	640,301
1925	63,080	902,632
1926	62,976	951,900
1927	88,780	1,227,725

Fertilizers, All Other

	Tons.	Dollars.
1871	.....	264,837
1881	.....	583,360
1891	231,915	2,182,274
1901	18,760	377,567
1913	74,834	1,875,999
1914	61,601	1,360,903
1915	89,224	2,128,190
1916	124,979	3,580,543
1917	216,222	6,056,887
1918	89,190	4,808,337
1919	106,656	6,384,432
1920	241,215	20,583,984
1921	108,431	5,988,308
1922	41,529	1,539,512
1923	43,988	1,784,529
1924	35,474	1,455,073
1925	48,227	2,110,393
1926	56,161	2,462,459
1927	80,677	3,420,942

Ferrovanadium

	Pounds.	Dollars.
1915	755,905	641,792
1916	1,113,076	1,018,121
1917	2,613,387	2,831,669
1918	2,089,347	2,582,670
1919	637,604	770,862
1920	184,250	253,579
1921	450,070	916,147
1922	69,952	84,827
1923	37,440	50,529
1924	74,020	103,544
1925	18,933	24,108

Not stated after 1925.

Fire Extinguishers

	Number.	Dollars.
1917	.....	895,591
1918	.....	1,688,963
1919	.....	1,055,502
1920	.....	887,484
1921	.....	757,572
1922	54,952	272,739
1923	60,226	324,801
1924	50,801	336,402
1925	28,850	242,151
1926	38,112	351,615
1927	29,097	368,696

Flavoring Extracts and Fruit Juices

	Pounds.	Dollars.
1913	.....	133,990
1914	.....	106,892
1915	.....	136,742
1916	.....	466,914
1917	.....	581,550
1918	.....	1,018,102
1919	.....	949,726
1920	.....	1,425,380
1921	.....	1,236,135
1922	2,319,469	761,284
1923	2,041,506	678,189

Stated separately after 1923.

Flavoring Extracts

	Pounds.	Dollars.
1924	1,550,149	569,392
1925	492,038	387,426
1926	566,329	463,375
1927	640,969	473,398

Fly Paper and Fly Traps

		Dollars.
1914	.....	217,857
1915	.....	115,921
1916	.....	75,155
1917	.....	77,425
1918	.....	102,979
1919	.....	146,690
1920	.....	245,111
1921	.....	283,455
1922	.....	188,950
1923	.....	167,494
1924	.....	175,327
1925	.....	163,258
1926	.....	197,916
1927	.....	150,076

Formaldehyde (Formalin)

	Pounds.	Dollars.
1918	.....	866,038
1919	.....	797,671
1920	.....	2,289,217
1921	.....	1,376,281
1922	1,940,576	209,386
1923	1,593,014	207,056
1924	4,193,055	496,065
1925	2,917,665	312,973
1926	2,534,244	239,522
1927	2,262,953	229,838

Fruit Juices and Other Beverages N. E. S.

	Gallons.	Dollars.
1924	241,901	289,610
1925	362,811	500,255
1926	378,552	567,021
1927	512,213	760,853

Gelatin

	Pounds.	Dollars.
1922	259,230	175,303
1923	309,895	201,071
1924	418,476	279,200
1925	377,265	269,919
1926	380,974	262,237
1927	329,988	209,935

German Silver

	Pounds.	Dollars.
1913	.....	65,362
1914	.....	38,691
1915	.....	30,690
1916	.....	273,826
1917	.....	410,295
1918	.....	270,703
1919	.....	304,514
1920	.....	426,768
1921	.....	720,343
1922	402,822	121,755
1923	513,754	154,954
1924	341,099	100,310
1925	284,813	80,234
1926	1,483,081	312,026
1927	1,135,314	284,368

Ginseng

	Pounds.	Dollars.
1871	114,221	119,385
1881	338,841	561,545
1891	.....	.....
1901	149,069	801,672
1914	224,605	1,832,686
1915	103,184	919,931
1916	256,082	1,597,508
1917	198,483	1,386,208
1918	259,892	1,717,548
1919	281,623	2,057,161
1920	220,970	2,847,900
1921	157,351	1,623,496
1922	189,999	1,605,257
1923	174,693	2,416,752
1924	176,371	2,606,578
1925	140,740	1,980,325
1926	157,151	1,899,569
1927	188,912	2,036,783

Glass Bottles, Vials, and Jars

		Dollars.
1914	.....	711,353
1915	.....	772,427
1916	.....	2,168,244
1917	.....	2,435,610
1918	.....	2,671,892
1919	.....	3,671,180
1920	.....	7,935,108
1921	.....	7,848,658
1922	.....	2,359,546
1923	.....	3,108,173
1924	.....	3,152,049
1925	.....	3,006,011
1926	.....	2,768,516
1927	.....	3,216,782

Glassware, Chemical

	Pounds.	Dollars.
1918	.....	153,937
1919	.....	198,083
1920	.....	207,366
1921	.....	294,672
1922	276,509	154,696
1923	206,356	145,988
1924	247,146	181,711
1925	247,474	194,094
1926	225,892	210,801
1927	205,125	194,483

Glass, Common Window

	Boxes (50 sq. ft.)	Dollars.
1891	.....	11,244
1901	.....	55,286
1913	.....	434,361
1914	.....	311,339
1915	489,288	1,443,113
1916	894,793	3,123,916
1917	942,648	3,483,596
1918	718,443	3,401,120
1919	905,962	6,058,427
1920	682,593	4,494,554
1921	357,578	2,396,185
1921	337,578	2,396,185
1922	25,431	151,100
1923	39,217	215,192
1924	47,781	215,889
1925	34,465	179,559
1926	28,139	154,576
1927	23,861	151,093

Glass, Other Window and Plate, N. E. S.

	Pounds.	Dollars.
1923	3,207,249	350,391
1924	2,234,935	254,309
1925	2,161,346	226,438
1926	2,548,087	268,593
1927	4,243,815	386,652

Glass, Plate, Unsilvered

	Square feet.	Dollars.
1913	165,129	58,830
1914	74,867	35,767
1915	2,730,046	831,727
1916	5,149,512	1,568,181
1917	6,117,955	2,223,329
1918	5,556,719	2,451,918
1919	8,584,758	4,912,896
1920	4,783,766	2,878,628
1921	3,053,579	2,188,104
1922	2,875,223	1,156,617
1923	2,269,796	907,618
1924	1,736,251	614,456
1925	1,536,734	427,909
1926	1,515,843	368,973
1927	675,822	237,600

Glucose (Corn Sirup)

	Pounds.	Dollars.
1881	821,937	28,587
1891	58,149,427	1,394,131
1901	204,209,974	3,113,898
1913	156,365,604	3,682,371
1914	162,680,378	3,766,284
1915	125,434,878	3,103,561
1916	148,523,098	3,772,860
1917	170,025,606	5,960,586
1918	80,970,744	4,949,159
1919	118,835,491	6,588,697
1920	219,425,235	13,831,817
1921	125,972,386	5,022,696
1922	258,447,893	6,109,862
1923	156,314,649	4,788,099
1924	141,141,220	4,860,251
1925	136,822,788	5,289,686
1926	165,589,145	5,737,399
1927	138,347,068	4,398,611

Glue of Animal Origin

	Pounds.	Dollars.
1871	81,110	12,316
1881	367,069	59,038
1891	986,552	110,292
1901	2,703,400	254,477
1913	2,544,932	276,619
1914	2,351,770	258,611
1915	2,874,225	298,136
1916	4,946,298	531,320
1917	4,064,231	513,775
1918	4,901,764	837,679
1919	7,283,693	1,432,589
1920	13,039,902	2,186,756
1921	5,977,180	1,147,676
1922	2,708,674	418,759
1923	2,905,059	431,133
1924	2,295,018	369,073
1925	2,431,391	372,084
1926	2,490,584	385,246
1927	2,321,780	359,879

Glue, Vegetable

	Pounds.	Dollars.
1922	891,860	98,121
1923	715,483	81,872
1924	961,053	90,561
1925	1,016,050	79,161

Not stated after 1925.

Glycerin

	Pounds.	Dollars.
1918	21,045,991	10,587,531
1919	13,018,882	6,833,432
1920	2,257,623	522,611
1921	1,388,194	316,753
1922	3,625,999	508,807
1923	1,691,407	288,177
1924	1,951,393	326,920
1925	1,065,524	202,060
1926	1,220,012	262,081
1927	576,545	150,041

Grape Sugar (Corn Sugar)

	Pounds.	Dollars.
1881	12,438,247	422,828
1891	.....	.....
1913	41,783,642	970,025
1914	36,850,496	799,635
1915	33,027,630	781,672
1916	37,863,084	962,101
1917	44,947,709	1,398,145
1918	16,887,557	1,045,512
1919	17,394,892	875,355
1920	25,839,015	1,559,620
1921	15,981,960	836,858
1922	15,534,234	448,244
1923	6,378,736	225,511
1924	6,909,709	296,167
1925	2,753,957	119,568
1926	4,552,385	154,415
1927	10,442,493	353,320

Exports from the United States

Greases, Lubricating

	Pounds.	Dollars.
1914	.....	2,394,918
1915	.....	2,384,396
1916	.....	3,994,436
1917	.....	2,816,958
1918	.....	2,986,815
1919	.....	4,710,484
1920	.....	6,157,323
1921	.....	6,851,936
1922	58,073,940	3,148,916
1923	69,669,800	3,639,805
1924	89,144,864	4,661,237
1925	94,835,439	5,152,121
1926	96,248,414	5,252,138
1927	96,480,422	5,176,816

Greases, Oils and Fats, Animal, N.E.S.

	Pounds.	Dollars.
1881	.....	725,321
1891	.....	2,038,886
1901	.....	3,339,948
1914	.....	5,046,959
1915	.....	4,286,007
1916	.....	5,156,568
1917	.....	3,405,227
1918	.....	2,612,488
1919	.....	2,981,497
1920	.....	8,994,603
1921	.....	4,602,801
1922	65,606,527	4,486,761
1923	51,809,812	4,256,831
1924	78,761,951	6,743,279
1925	85,609,273	9,115,236
1926	64,652,403	7,096,524
1927	89,322,336	8,128,890

Grease Stearin

	Pounds.	Dollars.
1922	3,406,737	277,215
1923	2,962,357	278,101
1924	4,096,531	382,242
1925	2,412,212	256,451
1926	2,555,973	291,614
1927	3,404,998	357,649

Gums and Resins, N. E. S.

	Pounds.	Dollars.
1922	1,657,680	387,780
1923	2,159,671	590,079
1924	1,843,093	634,095
1925	2,563,137	886,578
1926	2,886,166	874,397
1927	3,184,895	901,384

Gunpowder, Smokeless

	Pounds.	Dollars.
1922	925,480	369,848
1923	993,370	350,903
1924	1,507,484	495,570
1925	927,057	542,733
1926	880,888	516,870
1927	245,911	154,791

Gunpowder (Except Smokeless)

	Pounds.	Dollars.
1871	391,300	95,397
1881	1,694,483	275,579
1891	733,834	88,676
1901	1,463,499	193,345
1915	7,686,480	5,091,442
1916	212,821,076	173,736,374
1917	404,668,874	330,664,927
1918	337,505,953	257,190,883
1919	109,613,165	85,812,212
1920	1,721,991	710,397
1921	43,485,291	38,286,158
1922	410,705	129,216
1923	488,672	142,425
1924	422,453	195,559
1925	612,753	180,408
1926	646,569	156,300
1927	491,894	156,229

Gypsum or Plaster, Crude, Ground, Calcined and Manufactures

	Pounds.	Dollars.
1923	15,619,159	194,890
1924	19,704,383	290,748
1925	25,823,069	394,024
1926	39,061,299	601,722
1927	50,609,967	657,858

Honey

	Pounds.	Dollars.
1871	.....	2,479
1881	.....	109,007
1891	.....	83,325
1901	.....	55,574
1914	.....	135,660
1915	.....	114,038
1916	.....	252,487
1917	.....	736,139
1918	16,090,672	2,509,570
1919	10,368,342	2,422,454
1920	3,659,198	655,482
1921	1,112,015	182,616
1922	2,406,922	261,899
1923	2,891,478	290,067
1924	1,921,815	228 237
1925	6,213,645	649,732
1926	4,074,590	433,768
1927	11,206,999	970,998

Hops

	Pounds.	Dollars.
1871	3,273,653	316,288
1881	8,990,655	2,016,970
1891	8,736,080	2,327,474
1901	14,963,676	2,466,515
1914	24,262,896	6,953,529
1915	16,210,443	3,948,020
1916	22,409,818	4,383,929
1917	4,824,876	773,926
1918	3,494,579	993,773
1919	7,466,952	2,333,850
1920	30,779,508	17,716,222
1921	22,206,028	10,873,263
1922	19,521,877	4,851,623
1923	13,497,183	2,589,659
1924	20,460,707	6,501,247
1925	16,121,978	3,257,404
1926	14,997 974	3,794,080
1927	13,369,268	3,455,159

Infants' Food, Malted Milk, Etc.

	Pounds.	Dollars.
1918	.....	1,908,384
1919	.....	2,459,635
1920	.....	3,032,330
1921	.....	1,520,259
1922	2,480,589	720,587
1923	2,185,043	644,878
1924	1,820,291	542,481
1925	2,468,632	651,824
1926	2,516,987	684,414
1927	2,745,713	743,456

Ink, Printers' and Lithographic

	Pounds.	Dollars.
1901	.....	171,758
1915	.....	384,847
1916	.....	682,165
1917	.....	751,411
1918	.....	882,062
1919	.....	1,644,029
1920	.....	1,590,096
1921	.....	1,550,548
1922	8,655,372	993,352
1923	9,580,183	1,167,260
1924	10,132,580	1,305,758
1925	11,041,545	1,244,617
1926	11,005,826	1,450,796
1927	10,741,121	1,326,570

Ink, Writing

		Dollars.
1921	.....	206,947
1922	.....	357,909
1923	.....	241,424
1924	.....	234,795
1925	.....	232,387
1926	.....	240,799
1927	.....	188,711

Ink, All Other

	Pounds.	Dollars.
1871	.....	12,158
1881	.....	8,449
1891	.....	122,235
1901	.....	119,467
1915	.....	154,874
1916	.....	285,277
1917	.....	377,446
1918	.....	407,094
1919	.....	726,204
1920	.....	836,436
1921	.....	774,423
1922	389,124	125,081
1923	553,280	161,007
1924	519,218	198,461
1925	322,533	164,026
1926	516,947	201,432
1927	683,020	260,728

Insecticides, Fungicides, Etc.—Agricultural

	Pounds.	Dollars.
1927	1,983,678	240,641

Insecticides, Disinfectants, Etc.—Household

	Pounds.	Dollars.
1927	7,945,659	1,976,012

Instruments, Medical and Surgical

		Dollars.
1913	.....	222,650
1914	.....	206,421
1915	.....	560,741
1916	.....	355,170
1917	.....	516,355
1918	.....	671,250
919	.....	860,179
1920	.....	743,111
1921	.....	802,769
1922	.....	288,864
1923	.....	272,563
1924	.....	283,022
1925	.....	350,260
1926	.....	435,692
1927	.....	528,178

Instruments, Optical

		Dollars.
1915	.....	1,018,016
1916	.....	2,593,509
1917	.....	2,945,920
1918	.....	1,073,339
1919	.....	1,209,911
1920	.....	1,465,265
1921	.....	1,158,559
1922	.....	798,270
1923	.....	772,243

Not stated after 1923.

Iron, Pig, Ferromanganese and Spiegeleisen

	Tons.	Dollars.
1901	16	1,236
1918	4,935	1,054,548
1919	2,184	448,899
1920	2,374	354,570
1921	3,335	688,369
1922	1,021	79,195
1923	3,594	131,812
1924	4,120	131,403
1925	4,204	111 739
1926	1,694	67,758
1927	706	49,239

Iron, Pig, Ferrosilicon

	Tons.	Dollars.
1918	8,599	917,686
1919	3,712	378,523
1920	398	24,578
1921	577	36,725
1922	463	23,493
1923	931	38,968
1924	1,031	36,459

Not stated after 1924.

Lampblack

	Pounds.	Dollars
1871	.....	25,980
1881	.....	51,682
1891	.....	.....
1901	.....	.....
1913	.....	505 748
1914	.....	421,548
1915	.....	368,825
1916	.....	521,463
1917	.....	917,303
1918	.....	1,111,265
1919	.....	1,102,767
1920	.....	1,959,208
1921	.....	1,829,987
1922	17,062,311	2,028,105
1923	18,157,775	2,730,585
1924	37,563,672	4,929,142
1925	35,302,783	4,058,759

Not stated separately after 1925.

Lard

	Pounds.	Dollars.
1871	80,037,297	10,563,010
1881	378,142,496	35,226,575
1891	498,343,927	34,414,323
1901	611,357,514	46,560,148
1913	519,025,384	58,187,336
1914	481,457,792	54,402,911
1915	475,531,908	52,440,133
1916	427,011,338	47,634,376
1917	444,769,540	77,608,913
1918	392,506,355	98,216,856
1919	724,771,383	210,175,908
1920	587,224,549	171,523,351
1921	746,157,356	131,329,199
1922	766,950,103	91,484,669
1923	952,641,705	116,593,907
1924	1,014,898,388	129,090,796
1925	792,735,441	123,223,066
1926	696,445,258	114,470,609
1927	675,812,466	96,836,680

Lard, Neutral

	Pounds.	Dollars.
1913	44,777,692	5,129,899
1914	29,323,786	3,270,236
1915	26,021,054	3,022,321
1916	34,426,590	4,050,397
1917	17,576,240	3,168,089
1918	4,258,529	1,074,668
1919	17,395,888	5,392,710
1920	23,202,027	6,916,279
1921	22,544,303	4,149,296
1922	20,497,006	2,586,706
1923	26,494,079	3,424,413
1924	24,238,981	3,241,682
1925	20,420,916	3,521,178
1926	20,131,967	3,642 [illegible]
1927	20,056,556	3,135,267

Lard Compounds Containing Animal Fats

	Pounds.	Dollars.
1901	23,359,966	1,449,878
1913	67,456,832	5,915,759
1914	58,303,564	5,489,139
1915	69,980,614	6,045,752
1916	52,843,311	5,147,434
1917	56,359,393	8,269,844
1918	31,278,382	6,633,640
1919	128,157,327	31,138,153
1920	44,195,842	11,850,311
1921	42,155,971	6,099,914
1923	11,139,730	1,397,222
1924	6,907,366	935,340
1925	8,922,451	1,296,373
1926	14,957,990	2,151,325
1927	10,547,617	1,316,403

Lard Compounds and Other Substitutes for Lard, Vegetable

	Pounds.	Dollars.
1922	25,478,494	2,968,705
1923	17,983,588	2,221,343
1924	7,029,296	992,569
1925	6,578,444	976,128
1926	8,599,874	1,266,221
1927	6,802,008	915,843

Lead Pigs and Bars

	Pounds.	Dollars.
1901	6,354,924	285,158
1914	40,323,662	1,511,800
1915	193,024,221	7,926,604

Stated as following classes after 1915.

Lead Pigs and Bars, from Domestic Ore

	Pounds.	Dollars.
1916	153,941,629	9,190,302
1917	159,673,425	11,721,920
1918	129,954,274	10,390,928
1919	32,483,910	2,360,495
1920	8,132,608	610,728
1921	2,702,864	225,414
1922	8,787,906	434,965
1923	7,597,684	454,446
1924	5,884,462	379,683
1925	9,597,566	696,649
1926	13,589,757	994,856
1927	4,065,583	284,340

Lead Pigs and Bars, from Foreign Ore

	Pounds.	Dollars.
1916	52,265,948	2,114,692
1917	28,254,508	2,108,150
1918	84,260,273	6,965,492
1919	117,378,386	7,879,527
1920	61,648,426	3,596,098
1921	18,896,711	1,049,265
1922	74,685,868	3,472 574
1923	50,995,359	2,795,920
1924	114,281,919	6,191,380
1925	221,468,691	15,694,069
1926	130,296,781	9,369,435
1927	173,696,429	10,445,002

Lime

	Barrels (200 lbs.).	Dollars.
1901	28,487	29,562
1913	284,685	214,543
1914	285,749	200,437
1915	169,078	117,644
1916	258,538	143,182
1917	168,521	126,266
1918	142,525	150,197
1919	68,015	108,647
1920	54,424	111,162
1921	64,568	143,068
1922	54,179	87,386
1923	110,142	152,671
1924	129,394	194,613
1925	143,686	195,757
1926	142,942	216,898
1927	150,161	206,408

Lime Acetate

	Pounds.	Dollars.
1901	61,291,544	1,101,037
1913	80,579,835	2,221,427
1914	68,160,224	1,560,935
1915	24,673,247	486,405
1916	18,804,972	961,645
1917	12,959,222	807,847
1918	13,490,032	797,996
1919	9,369,940	401,476
1920	32,885,132	827,096
1921	12,845,700	350,635
1922	27,606,499	587,174
1923	26,134,454	797,338
1924	17,823,560	643,116
1925	21,288,742	640,807
1926	21,783,051	688,501
1927	16,127,622	582,683

Lime, Chlorinated (Bleaching Powder)

	Pounds.	Dollars.
1918	13,060,401	558,068
1919	15,639,918	450,147
1920	31,232,379	840,092
1921	37,425,093	1,146,378
1922	26,439,251	502,870
1923	40,651,029	681,287
1924	23,576,021	438,445
1925	25,780,879	439,694
1926	22,345,324	408,852
1927	18,371,826	341,880

Lithopone

	Pounds.	Dollars.
1922	3,231,722	169,982
1923	3,317,969	178,785
1924	2,110,429	129,440
1925	2,020,462	109,040
1926	3,119,011	161,883
1927	4,129,235	213,265

Magnesia and Manufactures

	Pounds.	Dollars.
1922	3,831,681	223,686
1923	5,332,096	298,996
1924	4,077,834	285,859
1925	3,889,563	258,041
1926	6,160,702	339,680
1927	6,359,338	327,316

Matches

	Pounds.	Dollars.
1871	.....	183,829
1881	.....	112,167
1891	.....	73,220
1901	.....	88,739
1917	.....	430,650
1918	.....	471,385
1919	.....	572,481
1920	.....	558,911
1921	.....	389,064
1922	1,184,648	217,821
1923	1,231,741	234,436
1924	1,154,001	195,558
1925	990,394	175,707
1926	777,511	142,394
1927	564,527	87,815

Exports from the United States

Metal Polishes

	Pounds.	Dollars.
1913	.....	127,898
1914	.....	162,504
1915	.....	167,277
1916	.....	225,783
1917	.....	214,800
1918	.....	192,691
1919	.....	282,043
1920	.....	451,934
1921	.....	346,104
1922	3,602,952	400,186
1923	2,553,406	312,181
1924	3,084,322	380,046
1925	3,188,649	375,885
1926	2,247,537	319,896
1927	2,574,429	367,103

Methanol, Pure and Denaturing Grades

	Gallons.	Dollars
1901	919,504	476,582
1913	1,837,173	788,143
1914	1,598,776	652,486
1915	944,374	438,846
1916	1,472,258	857,161
1917	825,334	646,939
1918	2,538,001	2,070,026
1919	1,339,204	1,299,340
1920	687,008	775,117
1921	467,763	1,031,686
1922	737,050	566,445
1923	1,207,023	1,275,284
1924	640,637	686,911
1925	527,429	523,942
1926	409,210	290,108
1927	281,348	241,002

Mica and Manufactures

	Pounds.	Dollars.
1917	.....	88,651
1918	.....	71,285
1919	.....	79,581
1920	.....	155,914
1921	.....	305,345
1922	1,134,397	129,186
1923	1,527,753	145,432
1924	1,407,561	178,579
1925	2,133,693	164,240
1926	2,148,725	220,908
1927	2,841,742	216,138

Mucilage

		Dollars.
1901	.....	8,967
1913	.....	26,238
1914	.....	26,182
1915	.....	14,504
1916	.....	30,149

Included in following class after 1916.

Mucilage and Paste

	Pounds.	Dollars.
1917	.....	337,125
1918	.....	400,813
1919	.....	469,231
1920	.....	659,727
1921	.....	602,263
1922	2,305,354	261,565
1923	2,742,807	304,845
1924	2,302,250	257,538
1925	2,605,048	285,994
1926	3,819,147	449,196
1927	3,273,872	396,321

Naphthalene

	Pounds.	Dollars.
1922	109,514	12,657
1923	95,164	10,386
1924	112,196	13,217

Not stated after 1924.

Nickel Oxide and Matte

	Pounds.	Dollars.
1901	5,990,676	1,510,508
1915	29,599,612	11,110,699
1916	25,649,995	9,876,403
1917	31,005,606	12,271,854
1918	18,818,212	7,680,502
1919	10,011,826	3,980,036
1920	2,392,614	1,144,083
1921	131,088	56,555
1922	9,897,775	1,147,993
1923	306,000	26,642

Not stated after 1923.

Nicotine and Tobacco Extracts

	Pounds.	Dollars.
1927	1,483,205	447,735

Oilcake, Coconut

	Pounds.	Dollars.
1920	224,313	6,404
1921	473,542	11,353
1922	7,960,197	106,057
1923	1,577,940	35,328
1924	2,310,620	48,447

Not stated after 1924.

Oilcake, Corn

	Pounds.	Dollars.
1901	12,703,209	131,774
1913	76,262,845	1,131,330
1914	59,030,623	909,407
1915	45,026,125	798,206
1916	18,996,490	297,041
1917	15,757,612	289,547
1918	457,584	10,246
1919	562,300	16,193
1920	510,800	15,216
1921	1,794,653	29,989
1922	1,767,689	31,097
1923	15,746	502

Not stated after 1923.

Oilcake, Cottonseed

	Pounds.	Dollars.
*1901	1,258,687,317	13,119,968
1913	1,128,092,367	15,225,798
1914	799,974,252	11,007,441
1915	1,222,699,889	15,432,126
1916	980,664,572	14,749,489
1917	864,862,375	35,059,920
1918	11,045,263	213,542
1919	179,148,955	5,286,428
1920	338,927,893	11,951,112
1921	359,986,856	7,304,118
1922	331,311,165	7,066,212
1923	342,544,194	7,789,075
1924	200,927,154	4,261,315
1925	593,663,417	12,522,746
1926	506,582,459	9,865,525
1927	589,447,753	9,322,013

* Includes "Meal."

Oilcake, Linseed

	Pounds.	Dollars.
1918	126,184,029	3,210,734
1919	161,088,337	4,753,170
1920	316,496,323	12,015,139
1921	373,079,051	9,624,882
1922	422,865,573	9,524,980
1923	536,555,238	11,577,111
1924	546,847,552	11,221,023
1925	671,460,032	14,982,348
1926	577,907,698	12,744,953
1927	609,520,259	12,423,480

Oilcake, Peanut

	Pounds.	Dollars.
1922	14,513,060	154,565
1923	672,000	11,760

Not stated after 1923.

Oilcake, all Other

	Pounds.	Dollars.
1922	3,172,090	55,161
1923	3,091,352	65,643
1924	1,291,612	22,253
1925	15,249,978	240,380
1926	13,344,088	210,323
1927	20,555,741	290,583

Oilcake and Meal, Flaxseed or Linseed

	Pounds.	Dollars.
1901	455,154,860	5,471,930
1913	838,119,654	12,982,423
1914	662,868,639	9,650,379
1915	524,794,434	9,048,061
1916	640,916,204	11,935,130
1917	536,976,419	10,255,355

Subdivided after 1917.

Oilcake and Meal, All Other

	Pounds.	Dollars.
1871	203,587,040	4,160,021
1881	448,559,413	6,284,364
1891	633,344,851	7,452,094
1913	6,886,270	104,701
1914	8,484,936	100,445
1915	9,900,878	126,414
1916	28,876,367	410,166
1917	21,558,676	308,681
1918	4,865,602	104,865
1919	60,444,481	1,820,674
1920	60,138,141	1,983,802
1921	9,373,533	234,330

Stated separately after 1921.

Oilcake Meal, Cottonseed

	Pounds.	Dollars.
1915	256,365,126	3,474,244
1916	77,256,997	1,149,478
1917	285,297,316	5,221,091
1918	33,635,530	770,192
1919	132,477,150	3,628,074
1920	110,644,890	3,933,800
1921	94,713,965	1,858,061
1922	117,656,019	2,416,446
1923	111,805,810	2,302,170
1924	49,439,121	1,032,627
1925	291,711,396	6,208,352
1926	209,922,241	4,188,327
1927	391,067,817	6,157,569

Oilcake Meal, Linseed

	Pounds.	Dollars.
1918	25,215,948	684,614
1919	41,699,626	1,164,396
1920	19,839,589	705,668
1921	18,184,807	449,993
1922	17,997,571	404,906
1923	38,057,227	840,615
1924	13,266,487	276,426
1925	19,666,051	439,456
1926	11,258,556	253,912
1927	15,600,727	314,421

Oilcake Meal, all Other

	Pounds.	Dollars.
1922	9,058,338	138,170
1923	2,732,116	53,542
1924	5,322,296	103,526
1925	25,581,764	496,192
1926	4,904,989	96,420
1927	2,882,729	49,351

Oil, Cod and Codliver

	Pounds.	Dollars.
1922	548,892	70,581
1923	323,393	64,145
1924	255,669	62,362

Not stated after 1924.

Oil, Fish

	*Pounds.	Dollars.
1871	1,402,016	1,145,406
1881	912,380	532,839
1891	1,467,321	401,203
1901	991,870	293,004
1913	1,901,953	501,227
1914	448,366	125,575
1915	88,880	29,802
1916	146,643	69,411
1917	123,848	81,556
1918	455,629	446,589
1919	282,855	365,823
1920	1,310,478	1,172,624
1921	118,261	122,027
1922	4,697,895	195,071
1923	3,503,275	172,558
1924	774,987	80,903
1925	726,178	121,574
1926	538,319	103,728
1927	935,032	112,389

* Quantity stated in gallons prior to 1922.

Oil, Animal, Lard

	*Pounds.	Dollars.
1871	147,802	153,850
1881	836,255	558,576
1891	1,092,448	562,986
1901	766,783	438,645
1913	154,983	113,665
1914	110,199	87,364
1915	184,019	111,637
1916	421,969	309,836
1917	329,244	321,721
1918	91,585	126,672
1919	82,470	124,887
1920	124,231	195,252
1921	669,772	87,438
1922	690,791	80,043
1923	736,990	88,774
1924	714,816	80,570

* Quantity stated in gallons prior to 1921.
Not stated after 1924.

Oil, Animal, Neat's-foot

	Pounds.	Dollars.
1922	1,147,511	175,875
1923	1,233,304	187,793
1924	1,348,991	235,116
1925	1,694,825	256,678
1926	1,301,297	231,432
1927	1,350,376	217,650

Oil, Animal, Oleo

	Pounds.	Dollars.
1891	80,231,035	7,859,130
1901	161,651,413	11,846,373
1913	92,849,757	10,866,253
1914	97,017,065	10,156,665
1915	80,481,496	9,341,188
1916	102,645,914	12,519,115
1917	67,110,111	11,065,019
1918	56,603,388	12,152,787
1919	59,292,322	15,670,854
1920	74,529,494	21,153,000
1921	106,414,800	15,211,998
1922	109,386,571	11,464,837
1923	104,956,378	12,067,089
1924	92,965,001	11,357,628
1925	105,145,483	11,767,628
1926	90,409,619	11,652,995
1927	92,719,505	10,588,889

Oil, Animal, Whale

	Pounds.	Dollars.
1922	583,270	58,061
1923	722,550	31,138
1924	92,614	11,570
1925	422,316	19,331
1926	668,173	27,987

Not stated after 1924.

Oil, Animal, Not Otherwise Specified

	*Pounds.	Dollars.
1871	80	137
1881	77,496	60,359
1891	512,253	317,594
1901	640,816	286,782
1913	1,603,325	970,717
1914	891,035	609,294
1915	559,197	405,635
1916	655,587	492,964
1917	416,213	378,294
1918	329,576	409,466
1919	1,422,344	2,023,190
1920	1,452,489	2,055,883
1921	2,502,467	393,252
1923	1,183,475	117,992
1924	3,075,501	300,332
1925	1,944,792	250,200
1926	1,404,338	188,865
1927	896,505	96,415

* Quantity stated in gallons prior to 1921.

Oil, Mineral, Illuminating (Kerosene)

	*Barrels. (42 gals.).	Dollars.
1871	133,007,177	31,309,780
1881	332,283,045	34,317,695
1891	571,119,805	40,221,201
1901	781,207,105	51,477,267
1913	1,048,894,297	66,189,265
1914	1,157,283,810	74,500,132
1915	886,316,740	53,607,082
1916	823,164,882	54,288,788
1917	833,969,012	642,377
1918	528,217,669	47,261,782
1919	725,686,746	81,495,706
1920	915,138,071	126,392,949
1921	833,194,727	128,089,900
1922	807,701,055	76,389,044
1923	854,563,611	81,976,661
1924	882,602,874	80,516,405
1925	892,267,121	85,433,981
1926	886,111,373	87,886,208
1927	21,349,245	96,289,835

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Insulating, or Transformer Oils

	Gallons.	Dollars.
1927	3,270,417	1,018,827

Oil, Mineral, Petroleum, Crude

	*Barrels. (42 gals.).	Dollars.
1871	9,460,816	1,820,803
1881	39,984,844	3,065,464
1891	91,415,095	5,876,452
1901	138,448,430	6,686,929
1913	195,642,935	7,750,767
1914	146,477,342	6,812,672
1915	152,514,129	4,911,634
1916	163,734,200	5,754,279
1917	176,368,675	7,162,550
1918	185,069,674	9,288,979
1919	163,782,498	9,905,490
1920	356,542,830	24,263,884
1921	355,200,756	29,137,765
1922	378,975,150	16,366,428
1923	552,566,487	20,268,679
1924	787,716,436	26,342,596
1925	621,175,086	23,969,246
1926	590,992,499	26,215,994
1927	15,372,741	27,239,976

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Lubricating and Heavy Paraffin

	Gallons.	Dollars.
1881	4,852,203	1,054,064
1891	33,514,730	4,858,603
1901	71,457,605	10,006,937
1913	213,671,499	29,574,410
1914	196,884,696	27,852,959
1915	214,429,099	28,499,786
1916	250,392,768	37,451,607
1917	271,028,546	48,649,557

Stated as following classes after 1917:—

Oil, Mineral, Lubricating, Paraffin

	Gallons.	Dollars.
1918	10,287,896	2,131,292
1919	7,596,525	1,173,821
1920	6,823,644	1,527,778
1921	1,183,675	573,450
1922	15,077,854	2,996,612

Stated separately after 1922.

Oil, Mineral, Lubricating, All Other

	Gallons.	Dollars.
1918	259,385,874	64,030,825
1919	265,552,016	84,982,874
1920	329,288,894	110,539,083
1921	332,274,197	136,495,631
1922	307,794,350	75,113,214

Stated separately after 1922.

Oil, Mineral, Lubricating, Red and Pale

	*Barrels. (42 gals.).	Dollars.
1923	186,347,147	38,147,688
1924	210,481,538	43,910,970
1925	212,190,013	42,048,500
1926	225,019,048	42,606,563
1927	5,502,690	45,248,103

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Lubricating, Black

	*Barrels. (42 gals.).	Dollars.
1923	47,155,711	6,361,092
1924	44,992,431	6,528,653
1925	49,055,791	6,399,944
1926	28,074,832	4,182,765
1927	621,294	3,300,642

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Lubricating, Cylinder

	*Barrels. (42 gals.).	Dollars.
1923	114,252,602	31,551,377
1924	112,142,588	32,973,087
1925	115,675,121	35,460,960
1926	140,729,945	42,408,624
1927	2,915,258	36,879,698

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Lubricating, Light Oils in Small Packages

	Gallons.	Dollars
1923	664,973	596,144
1924	503,706	535,466
1925	481,070	465,912
1926	443,092	427,985
1927	476,873	458,886

Oil, Mineral, Naphthas, Etc., Gasoline

	Gallons.	Dollars.
1913	81,698,917	10,931,490
1914	151,611,537	21,699,475
1915	156,860,666	17,603,317
1916	100,148,554	16,297,561
1917	226,154,560	46,932,967
1918	260,880,122	61,642,859
1919	322,920,067	78,088,061
1920	294,939,121	72,160,278
1921	382,610,683	103,199,531

Not stated separately after 1921.

Oil, Mineral, Gasoline, Naphtha and Other Light Products

	*Barrels. (42 gals.).	Dollars.
1871	7,209,592	746,797
1881	17,292,310	1,693,975
1891	12,171,147	993,056
1901	17,834,254	1,555,608
1913	101,821,572	14,269,878
1914	40,840,730	5,653,210
1915	94,335,128	10,296,928
1916	194,644,803	29,472,233
1917	199,563,352	41,057,840
1918	209,029,477	52,739,227
1919	146,301,861	38,654,419
1920	184,761,512	50,537,352
1921	259,603,571	77,415,408
1922	550,478,181	117,630,281
1923	674,716,726	134,165,991
1924	1,035,875,520	151,175,341
1925	1,217,930,141	175,158,381
1926	1,589,551,815	239,066,839
1927	42,841,426	246,142,953

* Quantity stated in Gallons, 1913 to 1927.

Oil, Mineral, Residuum

	*Barrels. (42 gals.).	Dollars.
1871	.....	14,770
1881	77,339	184,411
1891	58,066	77,422
1901	622,538	1,376,047
1913	27,513,568	496,237
1914	113,370,245	1,907,715
1915	9,952,970	230,552
1916	13,538,335	388,175
1917	551,967	33,813
1918	881,875	96,480
1919	181,121	14,557
1920	50,272,602	2,732,783
1921	9,825,633	609,302
1922	10,091,192	800,044
1923	8,364,896	668,784
1924	1,190,329	105,883
1925	2,725,586	232,074
1926	5,902,085	509,465
1927	195,871	584,399

* Quantity stated in Gallons, 1913 to 1926.

Oil, Mineral, Gas and Fuel Oil

	*Barrels. (42 gals.).	Dollars.
1914	475,143,205	13,747,863
1915	672,931,878	18,543,976
1916	897,853,433	24,770,296
1917	1,040,671,713	32,329,617
1918	1,223,283,641	61,137,607
1919	898,044,039	49,918,288
1920	685,738,142	38,195,061
1921	861,934,328	59,237,822
1922	740,196,772	32,099,290
1923	937,243,885	26,687,604
1924	1,361,122,653	41,613,640
1925	1,433,542,658	52,046,697
1926	1,381,540,720	44,916,778
1927	38,934,219	49,799,788

* Quantity stated in Gallons prior to 1927.

Oil, Mineral, Fuel or Bunker Oil, Laden on Vessels Engaged in Foreign Trade

	Barrels.	Dollars.
1915	2,898,393	2,567,017
1916	4,532,822	4,195,803
1917	5,924,460	6,418,474
1918	5,954,448	9,858,880
1919	8,648,967	17,308,722
1920	19,857,307	43,604,177
1921	28,903,722	72,130,004
1922	29,120,537	49,841,883
1923	34,477,720	45,856,007
1924	39,762,794	54,458,168
1925	44,449,884	65,731,170
1926	43,458,119	65,591,522
1927	48,552,279	73,546,702

Oil, Cocoa Butter

	Pounds.	Dollars.
1920	11,048,416	4,401,482
1921	3,170,617	987,534
1922	1,199,969	359,782
1923	956,849	287,026
1924	887,508	232,946
1925	1,576,702	427,170
1926	1,765,584	518,275
1927	289,727	104,337

Oil, Coconut

	Pounds.	Dollars.
1920	141,088,048	28,968,689
1921	6,639,055	886,574
1922	12,972,264	1,071,924
1923	12,992,853	1,088,027
1924	19,422,637	1,675,544
1925	17,889,820	1,678,511
1926	15,443,814	1,554,592
1927	19,826,137	1,787,792

Oil, Corn

	Pounds.	Dollars.
1901	28,851,270	1,831,980
1913	19,739,622	1,292,609
1914	18,281,576	1,307,204
1915	17,789,635	1,302,159
1916	8,967,826	770,076
1917	8,779,760	998,105
1918	1,831,114	306,219
1919	1,095,414	227,727
1920	12,482,679	2,954,637
1921	6,919,170	1,033,106
1922	5,732,993	678,180
1923	4,361,100	558,834
1924	3,678,608	495,777
1925	5,223,644	651,422
1924	4,195,988	540,333
1925	3,586,458	490,617
1926	2,927,111	408,239
1927	404,732	50,225

Oil, Cottonseed

	Pounds.	Dollars.
1871	.....	140,577
*1881	3,444,084	1,465,255
*1891	11,003,160	3,975,305
1901	*49,356,741	16,541,321
1913	315,232,892	20,736,972
1914	192,963,079	13,843,179
1915	318,366,525	21,872,940
1916	266,529,960	22,659,800
1917	158,911,767	19,878,325
1918	100,779,981	18,309,854
1919	178,709,033	36,970,545
1920	159,400,618	36,220,529
1921	283,269,025	31,392,838

* "Gallons." Stated separately after 1921.

Exports from the United States

Oil, Cottonseed, Crude

	Pounds.	Dollars.
1922	31,712,143	2,508,696
1923	25,933,401	2,258,361
1924	23,533,427	2,214,972
1925	24,062,177	2,245,432
1926	36,636,645	3,378,975
1927	38,321,294	2,920,929

Oil, Cottonseed, Refined

	Pounds.	Dollars.
1922	43,590,678	4,778,446
1923	38,358,468	4,238,709
1924	15,884,115	1,866,237
1925	29,198,439	3,508,066
1926	22,378,576	2,702,830
1927	19,258,851	2,033,533

Oil, Linseed

	*Pounds.	Dollars.
1871	37,841	35,962
1881	72,190	48,479
1891	76,789	48,267
1901	99,919	66,653
1913	1,733,925	874,461
1914	239,198	134,540
1915	1,212,133	660,089
1916	714,120	479,230
1917	1,201,554	1,117,895
1918	1,187,859	1,532,307
1919	1,096,304	1,805,291
1920	1,136,585	2,086,292
1921	4,209,577	719,414
1922	2,702,634	332,781
1923	3,105,089	410,104
1924	2,628,255	346,518
1925	2,404,821	338,092
1926	2,334,867	311,340
1927	2,738,491	270,764

* Quantity stated in gallons prior to 1921.

Oil, Peanut

	Pounds.	Dollars.
1920	4,922,781	1,196,831
1921	1,594,643	223,680
1922	963,102	100,691
1923	188,308	21,117
1924	167,529	14,448

Not stated after 1924.

Oil, Soya Bean

	Pounds.	Dollars.
1920	67,781,974	14,911,973
1921	5,117,605	760,643
1923	2,458,080	207,288
1923	2,495,218	218,460
1924	2,891,878	310,493
1925	578,601	64,913
1926	622,900	50,548
1927	3,104,114	386,045

Oil, Peppermint

	Pounds.	Dollars.
1891	45,321	120,831
1901	60,166	63,672
1913	144,663	395,551
1914	117,809	397,050
1915	184,981	384,593
1916	154,096	323,070
1917	100,032	218,627
1918	76,247	233,899
1919	65,548	325,070
1920	90,205	677,605
1921	50,425	286,624
1922	154,344	314,643
1923	102,507	290,715
1924	159,729	536,858
1925	127,218	823,116
1926	49,475	657,610
1927	143,984	803,787

Oils, Vegetable, All Other, Fixed or Expressed

	Pounds.	Dollars.
1891	.....	93,429
1901	.....	363,066
1913	.....	420,360
1914	.....	338,956
1915	.....	1,198,852
1916	.....	2,230,002
1917	.....	3,004,283
1918	.....	3,951,659
1919	.....	18,512,517
1920	.....	3,258,446
1921	.....	1,013,541
1922	6,369,664	669,142
1923	8,063,141	863,031
1924	7,118,048	865,443
1925	6,779,829	770,904
1926	7,974,479	927,790
1927	8,329,176	953,972

Oils, Vegetable, All Other, Essential or Distilled

	Pounds.	Dollars.
1871	.....	119,311
1881	.....	92,738
1891	.....	65,104
1901	.....	169,004
1913	.....	325,040
1914	.....	230,557
1915	.....	413,104
1916	.....	705,037
1917	.....	1,062,809
1918	.....	857,044
1919	.....	1,216,870
1920	.....	1,551,992
1921	.....	890,472
1922	.....	521,907
1923	583,670	611,659
1924	1,098,855	774,786
1925	1,175,504	923,111
1926	1,637,394	967,530
1927	3,728,064	1,107,474

Oils, Other Edible Vegetable Oils and Fats

	Pounds.	Dollars.
1927	1,425,297	214,882

Oilseeds

(Not elsewhere stated)

	Pounds.	Dollars.
1922	3,836,852	140,590
1923	2,721,909	94,967
1924	4,083,304	246,348
1925	3,169,900	212,316
1926	3,242,297	240,973
1927	820,821	89,091

Oleic Acid, or Red Oil

	Pounds.	Dollars.
1922	3,590,298	290,482
1923	2,378,676	201,556
1924	2,693,135	220,272
1925	1,432,931	126,814
1926	774,359	79,371
1927	871,971	79,581

Oleo Stock

	Pounds.	Dollars.
1922	15,596,295	1,523,464
1923	12,520,959	1,359,349
1924	11,344,686	1,277,193
1925	15,128,948	1,890,776
1926	11,833,316	1,513,345
1927	12,031,543	1,302,011

Oleo and Lard Stearin

	Pounds.	Dollars.
1922	10,678,056	1,049,692
1923	10,134,498	1,051,212
1924	7,081,402	760,833
1925	7,138,661	868,408
1926	7,660,673	1,002,706
1927	6,669,828	721,084

Oleomargarin of Animal or Vegetable Fats

	Pounds.	Dollars.
1926	1,256,251	182,014
1927	942,296	149,115

Oleomargarin Containing Animal Fats

	Pounds.	Dollars.
1881	20,327,671	3,815,560
1891	1,986,743	255,024
1901	12,990,699	484,501
1913	2,987,582	311,485
1914	2,532,821	263,453
1915	5,252,183	617,085
1916	5,426,221	640,480
1917	5,651,267	901,659
1918	6,309,896	1,631,267
1919	18,570,400	5,179,429
1920	20,952,180	6,047,413
1921	6,219,165	1,478,649
1922	1,989,421	353,803
1923	2,027,546	327,986
1924	1,125,096	179,906
1925	732,311	122,018

Not stated separately after 1923.

Oleomargarin, Vegetable

	Pounds.	Dollars.
1922	333,756	47,769
1923	1,736,389	235,842
1924	270,900	44,131
1925	155,171	24,790

Not stated separately after 1925.

Paints, Dry Colors, N. E. S.

	Pounds.	Dollars.
1914	.....	690,836
1915	.....	1,072,736
1916	.....	1,591,913
1917	.....	1,810,393
1918	.....	1,907,667
1919	.....	2,808,980
1920	.....	2,991,618
1921	.....	2,170,237
1922	31,992,345	1,350,448
1923	35,146,264	1,633,416
1924	33,363,044	1,437,948

Not stated separately after 1924.

Paints, Enamel Paints

	Gallons.	Dollars.
1922	.....	418,521
1923	.....	579,843
1924	.....	497,639
1925	.....	564,754
1926	.....	1,216,060
1927	390,321	1,045,869

Paints, Other Ready Mixed

	Gallons.	Dollars.
1914	852,910	1,096,335
1915	703,494	884,700
1916	1,099,721	1,884,226
1917	1,216,062	1,756,393
1918	1,519,472	2,398,332
1919	2,288,632	4,556,192
1920	2,551,531	5,278,390
1921	2,317,630	5,357,696
1922	1,080,699	2,258,019
1923	1,652,203	3,344,826
1924	1,937,294	3,883,649
1925	2,098,862	4,364,770
1926	2,192,415	4,523,916
1927	2,514,609	5,165,616

Paints, Red Lead

	Pounds.	Dollars.
1918	4,792,330	567,854
1919	7,952,730	946,114
1920	3,072,731	348,907
1921	2,046,339	244,151
1922	2,015,696	168,724
1923	4,098,227	401,191
1924	2,517,030	265,091
1925	1,452,968	163,315
1926	1,815,177	200,247
1927	2,160,833	219,550

Paints, White Lead

	Pounds.	Dollars.
1914	16,845,154	1,013,506
1915	19,700,810	1,070,646
1916	29,107,449	1,861,730
1917	21,388,938	1,944,145
1918	18,235,783	2,072,352
1919	20,462,348	2,337,318
1920	34,441,918	3,598,913
1921	17,408,803	1,895,696
1922	8,945,730	672,211
1923	8,575,154	710,655
1924	10,081,589	807,313
1925	12,585,507	1,131,169
1926	13,410,634	1,251,819
1927	11,393,274	992,917

Paints, Not Elsewhere Specified

	Pounds.	Dollars.
1871	.....	172,604
1881	.....	287,338
1891	.....	690,698
1901	.....	1,317,961
1914	.....	1,779,863
1915	.....	1,527,494
1916	.....	3,259,539
1917	.....	4,413,549
1918	.....	4,876,312
1919	.....	6,213,430
1920	.....	7,310,876
1921	.....	5,947,461
1922	10,088,393	1,720,360
1923	11,476,700	2,007,894
1924	9,368,566	1,599,601
1925	9,529,435	1,749,672
1926	11,509,686	2,490,478
1927	9,308,733	1,923,022

Paper, Grease- and Waterproof

	Pounds.	Dollars.
1918	.....	155,188
1919	.....	596,887
1920	.....	239,512
1921	.....	345,366
1922	1,096,766	143,467
1923	1,365,182	182,340
1924	1,733,827	217,905
1925	1,639,822	198,637
1926	2,376,837	349,477
1927	2,479,406	351,656

Paraffin and Paraffin Wax

	Pounds.	Dollars.
1871	37,423	4,758
1881	5,369,821	437,187
1891	66,366,003	3,714,649
1901	129,184,964	6,857,288
1913	290,678,861	9,679,273
1914	186,357,728	6,516,338
1915	330,374,056	10,589,843
1916	360,650,114	12,873,250
1917	348,743,903	16,038,811

Stated as following classes after 1917:—

Paraffin Wax, Unrefined

	Pounds.	Dollars.
1918	82,534,361	4,677,280
1919	58,729,436	4,915,237
1920	79,023,341	5,377,089
1921	50,121,130	2,994,654
1922	69,651,581	2,039,943
1923	94,914,178	2,773,283
1924	92,065,331	3,246,454
1925	76,936,429	3,853,025
1926	70,302,980	3,714,826
1927	67,082,124	3,228,117

Paraffin Wax, Refined

	Pounds.	Dollars.
1918	164,159,159	13,866,810
1919	185,078,571	19,042,149
1920	282,384,250	26,088,672
1921	203,289,734	17,524,258
1922	189,864,980	6,965,791
1923	232,368,527	8,329,708
1924	275,579,838	11,581,138
1925	256,488,677	14,111,913
1926	273,199,229	15,547,800
1927	259,161,962	14,082,180

Paste

	Dollars.
1901	863
1913	69,032
1914	68,831
1915	91,522
1916	298,537
1917	299,585

Included in "Mucilage and Paste" after 1917.

Peanuts

	Pounds.	Dollars.
1915	5,875,076	325,725
1916	8,669,430	450,705
1917	22,413,297	1,336,338
1918	12,488,209	1,517,831
1919	13,596,660	1,475,195
1920	14,137,956	1,740,002
1921	13,149,417	1,063,353
1922	12,621,302	834,912
1923	8,716,289	681,189
1924	3,993,914	381,492
1925	2,862,773	307,201
1926	3,711,195	302,241
1927	5,068,612	397,820

Perfumery and Toilet Waters

		Dollars
1871	.....	392,993
1881	.....	292,939
1891	.....	450,663
1901	.....	880,994
1913	.....	1,441,982
1914	.....	1,620,872
1915	.....	1,715,059
1916	.....	2,903,063
1917	.....	5,618,620
1918	.....	3,965,465
1919	.....	6,077,854
1920	.....	7,979,237
1921	.....	6,236,766
1922	.....	504,167
1923	.....	582,435
1924	.....	461,996
1925	.....	439,932
1926	.....	424,381
1927	.....	379,215

Petroleum Asphalt

	Tons.	Dollars.
1926	109,421	2,560,068
1927	241,711	5,794,256

Petroleum Jelly, Petrolatum

	Pounds.	Dollars.
1913	.....	536,637
1914	.....	661,889
1915	.....	838,842
1916	.....	1,099,315
1917	.....	989,367
1918	.....	1,278,658
1919	.....	2,608,701
1920	.....	3,156,286
1921	.....	2,072,595
1922	7,264,224	1,254,183
1923	7,579,221	1,186,230
1924	10,026,134	1,211,606
1925	7,971,370	1,131,944
1926	5,648,619	991,436
1927	5,163,205	862,748

Pigments, Ocher, Umber, Sienna, Metallic, Whiting, Etc.

	Pounds.	Dollars.
1923	29,458,942	1,025,438
1924	29,094,818	892,507
1925	26,438,536	791,545
1926	33,348,402	997,070
1927	35,048,106	1,039,491

Pigments, Chemical, N. E. S.

	Pounds.	Dollars.
1925	5,335,926	622,344
1926	6,420,933	803,547
1927	4,817,414	595,784

Plasters, Medicated

	Pounds.	Dollars.
1925	487,357	636,536
1926	501,120	632,465
1927	377,126	514,369

Platinum, Ingots, Sheets, Wire, Alloys and Scrap

	Ounces, troy.	Dollars.
1913	1,299	57,071
1914	273	12,977
1915	1,397	53,266
1916	1,083	92,388
1917	3,254	207,662
1918	468	50,697
1919	91	10,074
1920	1,640	223,332
1921	3,065	234,804
1922	1,198	84,250
1923	1,080	118,938
1924	3,275	358,205
1925	11,933	1,314,773
1926	14,907	1,641,243
1927	13,772	1,307,891

Platinum Manufactures (Except Jewelry)

	Ounces, troy.	Dollars.
1913	.....	126,013
1914	.....	71,172
1915	.....	27,101
1916	.....	82,929
1917	.....	77,265
1918	.....	33,557
1919	.....	30,363
1920	.....	85,364
1921	.....	114,873
1922	486	35,967
1923	279	24,969
1924	882	88,178
1925	2,254	234,427
1926	3,396	208,837
1927	1,608	155,465

Plumbago or Graphite, Unmanufactured

	Pounds.	Dollars.
1881	.....	135
1891	.....	.....
1900	.....	35,908
1913	4,503,569	321,679
1914	5,376,880	387,075
1915	2,324,081	152,446
1916	936,869	46,907
1917	2,500,057	163,333
1918	4,912,730	331,369
1919	1,392,043	102,162
1920	1,306,859	107,552
1921	1,195,228	84,908
1922	1,893,881	90,183
1923	1,197,760	100,782
1924	2,003,891	147,613
1925	2,170,979	159,908
1926	1,076,866	75,210

Included in next class after 1926.

Plumbago or Graphite and Manufactures, Except Crucibles

	Pounds.	Dollars.
1913	.....	175,383
1914	.....	269,499
1915	.....	368,333
1916	.....	845,729
1917	.....	1,206,305
1918	.....	716,538
1919	.....	862,544
1920	.....	517,188
1922	2,028,463	255,019
1923	2,142,055	302,941
1924	1,554,195	268,489
1925	1,824,136	289,286
1926	3,281,135	455,031
1927	4,133,254	480,236

Potash, Bichromate

	Pounds.	Dollars.
1922	4,430,208	433,552
1923	3,484,876	318,220
1924	1,574,674	142,695
1925	901,576	74,054
1926	251,978	19,717

Not stated after 1926.

Potash, Chlorate

	Pounds.	Dollars.
1918	1,564,662	681,128
1919	1,903,133	678,276
1920	2,845,858	475,034
1921	1,130,771	179,300
1922	447,730	46,252
1923	391,120	39,067
1924	493,417	26,538

Not stated after 1924.

Potash, All Other

	Pounds.	Dollars.
1918	.....	961,989
1919	.....	1,318,188
1920	.....	3,362,827
1921	.....	1,309,852
1922	7,483,175	296,378
1923	4,232,193	199,778
1924	3,261,590	156,391
1925	2,477,853	274,359
1926	3,545,149	317,670
1927	3,086,564	352,102

Pyroxylin Products, Known as Celluloid, etc., Unmanufactured

	Pounds.	Dollars.
1922	1,225,033	1,494,372
1923	1,790,701	2,232,074
1924	1,756,210	1,991,701
1925	2,629,360	2,371,849
1926	2,300,144	1,770,968
1927	1,700,967	1,320,616

Quicksilver or Mercury

	Pounds.	Dollars.
1871	994,035	732,845
1881	2,995,948	1,124,955
1891	157,052	88,359
1901	716,559	400,298
1913	40,410	21,885
1914	64,190	32,241
1915	222,927	155,089
1916	232,763	274,086
1917	1,018,094	1,071,325
1918	502,088	679,414
1919	538,325	651,033
1920	330,175	399,263
1921	27,358	25,022
1922	29,650	19,169
1923	20,902	17,613
1924	20,669	22,996
1925	14,431	13,485
1926	11,544	12,919

Not stated after 1926.

Quinine Sulphate and Other Salts of Cinchona

	Ounces.	Dollars.
1922	355,181	219,534
1923	365,852	160,366
1924	326,282	164,149
1925	637,373	215,258
1926	314,825	162,683
1927	274,837	127,847

Rosin, Gum

	Barrels (500 lbs.)	Dollars.
1871	511,959	1,600,651
1881	1,023,710	2,529,423
1891	1,790,251	3,467,199
1901	2,820,815	4,742,457
1913	2,806,046	17,359,145
1914	2,417,950	11,217,316
1915	1,372,316	6,220,321
1916	1,571,279	8,874,313
1917	1,638,590	10,705,972
1918	1,070,929	7,878,718
1919	881,777	11,323,381
1920	1,322,034	24,847,681
1921	877,109	10,363,147
1922	1,403,721	6,623,499
1923	1,689,742	10,157,216
1924	1,205,038	10,659,679
1925	1,412,289	16,047,225
1926	1,086,040	21,815,412
1927	1,087,795	22,923,325

Rosin, Wood

	Barrels. (500 lbs.).	Dollars.
1927	140,913	2,526,196

Salt

	Pounds.	Dollars.
1871	7,209,560	47,115
1881	2,739,300	14,752
1891	5,242,280	29,510
1901	14,183,167	67,316
1913	128,035,915	441,673
1914	148,931,265	542,783
1915	165,619,386	616,132
1916	165,637,801	600,648
1917	194,151,456	726,761
1918	267,045,840	1,416,798
1919	242,143,146	1,541,766
1920	257,493,745	1,610,061
1921	242,632,102	1,649,423
1922	257,884,879	1,521,529
1923	259,490,565	1,260,733
1924	261,232,700	1,198,242
1925	296,101,252	1,261,195
1926	319,422,301	1,297,568
1927	310,430,078	1,244,722

Exports from the United States

Seed, Cotton

	Pounds.	Dollars.
1871	.....	29,386
1881	75,693	3,031
1891	10,108,014	85,315
1901	43,329,257	366,953
1913	24,048,647	328,988
1914	16,342,384	215,115
1915	6,314,439	94,237
1916	2,475,907	37,811
1917	1,001,369	35,434
1918	1,565,052	57,693
1919	1,603,795	65,937
1920	3,506,218	197,450
1921	4,811,313	246,783
1922	2,355,318	83,755

Not stated after 1922.

Seed, Flax

	Bushels.	Dollars.
1871	282	721
1881	.....	.....
1891	144,848	184,564
1901	2,755,683	4,319,102
1913	16,894	26,699
1914	305,546	436,874
1922	78,268,703	6,154,911
1915	4,145	9,748
1916	2,614	6,501
1917	1,017	3,671
1918	21,481	98,165
1919	15,574	110,142
1920	24,044	182,796
1921	1,481	4,378
1922	2,267	7,607

Not stated after 1922.

Soap, Laundry

	Pounds.	Dollars.
1923	68,742,844	4,828,790
1924	59,097,581	4,184,584
1925	54,456,663	3,859,856
1926	56,307,234	4,022,589
1927	63,328,826	4,200,770

Soap, Toilet or Fancy

	Pounds.	Dollars.
1871	.....	19,954
1881	.....	44,396
1891	.....	86,704
1901	.....	562,514
1913	.....	2,132,663
1914	.....	2,141,633
1915	.....	1,777,342
1916	.....	2,610,481
1917	.....	2,122,674
1918	.....	2,246,258
1919	.....	3,896,179
1920	.....	6,625,259
1921	.....	4,182,428
1922	7,565,881	2,869,007
1923	8,563,954	3,250,030
1924	5,618,714	2,460,670
1925	5,865,447	2,507,277
1926	8,082,253	3,060,802
1927	8,629,103	2,900,223

Soap, Other

	Pounds.	Dollars.
1871	7,786,276	576,026
1881	13,323,737	650,361
1891	25,750,671	1,050,559
1901	28,779,000	1,006,666
1913	51,292,554	2,496,904
1914	58,547,763	2,797,369
1915	63,367,750	3,080,957
1916	75,548,686	3,709,277
1917	73,049,219	4,169,117
1918	82,726,757	6,894,454
1919	143,128,191	13,723,225
1920	155,891,586	16,102,825
1921	85,830,216	8,447,007
1923	16,231,584	1,462,451
1924	18,493,281	1,560,252
1925	15,603,908	1,373,042
1926	14,137,737	1,263,675
1927	13,045,720	1,178,887

Soap Stock, Vegetable

	Pounds.	Dollars.
1923	3,610,593	238,977
1924	3,996,290	230,816
1925	6,166,826	335,500
1926	12,167,877	727,889
1927	11,171,088	620,003

Soda Ash

	Pounds.	Dollars.
1918	198,752,457	6,074,879
1919	191,804,329	6,261,518
1920	116,535,500	2,804,130
1921	113,481,062	3,308,783
1922	33,690,180	757,648
1923	29,858,337	699,671
1924	26,404,428	673,735
1925	33,204,687	779,533
1926	34,701,719	855,755
1927	41,504,725	961,256

Soda Bicarbonate

	Pounds.	Dollars.
1920	11,998,510	360,601
1921	13,353,769	389,337
1922	14,803,631	347,233
1923	16,849,078	371,065
1924	15,920,717	357,494
1925	15,310,178	322,456
1926	19,391,529	383,789
1927	18,449,361	343,478

Soda Bichromate and Chromate

	Pounds.	Dollars.
1925	3,496,145	211,166
1926	7,820,620	477,768
1927	9,461,452	595,950

Soda Caustic

	Pounds.	Dollars.
1918	134,729,601	8,629,086
1919	127,192,309	6,382,511
1920	229,146,363	9,321,902
1921	101,021,827	5,478,055
1922	123,126,777	4,660,815
1923	115,834,650	4,061,858
1924	100,243,033	3,175,791
1925	94,806,930	2,849,278
1926	105,276,932	3,109,699
1927	104,919,887	3,117,134

Soda Cyanide

	Pounds.	Dollars.
1922	1,248,294	235,224
1923	3,491,859	391,496
1924	5,620,819	552,769
1925	1,481,284	269,002
1926	1,917,807	310,581
1927	1,425,418	231,249

Soda Salts and Preparations

		Dollars.
1915	.....	3,141,022
1916	.....	12,649,854
1917	.....	18,381,450

Not stated prior to 1915 and subdivided after 1917; see following classes.

Soda, Sal Soda

	Pounds.	Dollars.
1918	14,076,264	205,489
1919	10,675,870	186,382
1920	12,763,399	202,039
1921	10,376,424	207,539
1922	11,061,664	200,903
1923	12,185,928	186,550
1924	12,784,299	194,172
1925	12,459,512	176,515
1926	13,618,569	192,211
1927	12,746,736	163,288

Soda Silicate (Water Glass)

	Pounds.	Dollars.
1918	26,125,740	373,822
1919	26,009,043	400,508
1920	33,692,535	420,124
1921	23,099,660	321,972
1922	26,024,366	279,041
1923	31,430,252	308,862
1924	32,225,650	314,082
1925	36,089,562	321,238
1926	44,199,518	381,829
1927	50,766,700	408,325

Soda, Other Salts of

	Pounds.	Dollars.
1918	.....	7,421,521
1919	.....	6,475 158
1920	.....	7,485,008
1921	.....	5,378,899
1922	97,518,434	2,439,113
1923	129,704,630	2,363,007
1924	121,116,444	2,175,981
1925	102,676,879	1,713,375
1926	100,750,268	1,353,362
1927	70,973,698	1,520,302

Spices

	Pounds.	Dollars.
1891	.....	22,440
1901	.....	20,204
1914	.....	84,427
1915	.....	76,297
1916	.....	250,827
1917	.....	287,484
1918	.....	507,712
1919	.....	539,318
1920	.....	607,442
1921	.....	322,524
1922	1,363,252	167,241
1923	1,644,959	200,769
1924	1,667,842	198,963
1925	1,531,794	235,581
1926	1,166,986	203,986
1927	1,437,374	219,862

Sponges

	Pounds.	Dollars.
1871	.....	1,546
1881	.....	6,736
1891	36,966	20,821
1901	63,654	29,554
1913	205,804	177,059
1914	200,470	173,866
1915	117,618	109,635
1916	197,326	165,884
1917	116,131	129,063
1918	130,471	177,210
1919	187,151	212,641
1920	298,021	307,123
1921	110,928	156,163
1922	114,229	141,050
1923	141,049	174,242
1924	122,271	122,446
1925	151,809	157,640
1926	100,559	140,937
1927	95,988	150,561

Starch

	Pounds.	Dollars.
1871	1,761,813	115,698
1881	13,473,419	629,710
1891	12,883,821	475,817
1901	102,800,725	2,005,865
1913	110,987,591	2,609,716
1914	76,713,779	1,825,230
1915	107,036,638	2,939,453
1916	210,185,192	5,576,914
1917	146,423,822	4,721,533

Stated separately after 1917.

Starch, Cornstarch (Including Corn Flour)

	Pounds.	Dollars.
1918	38,659,323	2,220,377
1919	105,726,970	5,333,480
1920	163,314,642	10,238,284
1921	110,514,424	4,251,173
1922	348,940,114	7,294,865
1923	254,060,008	6,741,443
1924	255,134,988	8,148,320
1925	209,865,494	7,222,626
1926	208,462,588	6,970,908
1927	212,374,880	6,502,640

Starch, All Other

	Pounds.	Dollars.
1918	35,223,390	2,282,015
1919	38,061,260	2,197,518
1920	74,293,884	4,675,096
1921	24,850,212	1,146,163
1922	37,932,600	903,786
1923	6,736,187	238,612
1924	7,707,391	277,840
1925	4,381,557	202,975
1926	16,106,601	613,923
1927	20,737,476	619,675

Stearin from Animal Fats

	Pounds.	Dollars.
1871	.....	2,506
1881	1,118,848	87,924
1891	1,347,386	62,194
1915	11,457,907	1,083,665
1916	13,062,247	1,461,661
1917	12,936,357	1,798,317
1918	19,360,030	2,181,317
1919	11,537,284	2,309,979
1920	22,505,608	4,717,748
1921	19,177,311	2,429,414
1922	33,017,879	3,183,684

See "Oleo and Lard Stearin, Etc." after 1922.

Stearin, Vegetable

	Pounds.	Dollars.
1917	1,321,773	179,092
1918	1,226,127	248,585
1919	782,467	166,423
1920	5,138,225	962,394
1921	1,848,313	224,576
1922	1,949,422	194,596
1923	564,236	56,219
1924	175,998	24,874

Not stated separately after 1924.

Sulphur or Brimstone

	Tons.	Dollars.
1913	73,861	1,353,310
1914	110,022	2,018,724
1915	48,391	885,756
1916	68,460	1,314,290
1917	177,548	3,595,512
1918	140,525	3,842,904
1919	122,891	3,731,396
1920	393,404	8,725,112
1921	376,046	6,546,630
1922	409,722	6,069,871
1923	470,900	6,985,861
1924	454,333	6,993,835
1925	536,911	8,990,383
1926	644,301	11,803,370
1927	670,221	13,240,726

Sulphur, Refined, Sublimed, and Flowers

	Pounds.	Dollars.
1922	5,162,966	113,729
1923	5,166,092	128,523
1924	4,598,639	101,868
1925	5,334,938	127,478
1926	8,496,278	179,399
1927	21,232,120	398,126

Talcum and Other Toilet Powders

	Pounds.	Dollars.
1922	3,642,604	1,397,542
1923	3,734,831	1,496,567
1924	3,314,013	1,609,905
1925	3,356,216	1,751,024
1926	3,493,828	1,912,878
1927	3,116,337	1,619,876

Tallow

	Pounds.	Dollars.
1871	33,859,317	3,025,035
1881	96,403,372	6,800,628
1891	111,689,251	5,501,049
1901	77,166,889	3,848,561
1913	30,586,300	1,910,439
1914	15,812,831	1,002,011
1915	20,239,988	1,388,445
1916	16,288,743	1,326,472
1917	15,209,369	1,800,909
1918	5,014,964	931,941
1919	16,172,111	2,325,177
1920	32,937,026	5,738,181
1921	16,843,868	1,920,376
1922	31,376,275	2,210,762
1923	35,876,238	2,972,690
1924	37,371,722	2,946,676
1925	28,775,863	2,618,528
1926	12,221,438	1,130,743
1927	9,128,106	789,633

Tanning Extracts, Chestnut

	Pounds.	Dollars.
1922	7,911,316	253,815
1923	7,386,713	268,098
1924	9,309,452	301,303
1925	7,814,685	241,970
1926	6,117,614	178,634
1927	6,671,435	195,309

Tanning Extracts, Other (Vegetable and Chemical)

	Pounds.	Dollars.
1922	22,612,678	1,051,163
1923	24,942,925	1,174,108
1924	23,400,416	1,148,249
1925	21,063,238	1,152,431
1926	22,976,856	1,188,242
1927	24,819,816	1,284,137

Tar, Turpentine and Pitch

	Barrels.	Dollars.
1871	32,584	93,884
1881	46,582	109,381
1891	25,806	46,274
1901	50,526	123,464
1914	351,352	548,891
1915	239,661	430,612
1916	67,963	291,731
1917	103,397	561,566
1918	82,030	598,211
1919	48,030	384,263
1920	61,790	534,175
1921	41,748	377,649
1922 (July 1 to Dec. 1)	9,817	63,158

Sub-divided after Dec. 31. See following classes.

Tar and Pitch, Wood

	*Barrels. (500 lbs.).	Dollars.
1922	31,520	159,173
1923	34,499	204,974
1924	89,730	427,193
1924	28,238	189,274
1926	22,115	203,916
1927	27,240	273,477

* Quantity stated in Barrels (280 lbs.) prior to 1927.

Tin Bars, Blocks or Pigs

	Pounds.	Dollars.
1917	798,288	427,709
1918	209,391	127,219
1919	488,902	352,483
1920	829,016	509,086
1921	2,564,532	968,354
1922	1,455,477	432,574
1923	1,922,327	685,509
1924	998,860	430,317
1925	788,893	408,051
1926	1,024,165	555,420
1927	1,865,602	836,241

Tungsten, Manganese and Other Ferro-Alloys, N. E. S.

	Pounds.	Dollars.
1917	1,784,306	3,597,426
1918	2,184,769	4,056,437
1919	177,123	408,148
1920	17,494	57,820
1921	1,600	1,625
1922	303	13,189
1923	1,078	58,049
1924	1,582	67,301

Quantity in tons after 1921.
Not stated after 1924.

Turpentine, Gum Spirits

	Gallons.	Dollars.
1871	2,453,554	1,009,508
1881	6,595,528	2,414,719
1891	12,243,621	4,668,140
1901	20,240,851	7,715,029
1913	21,039,597	8,794,656
1914	18,900,704	8,095,958
1915	9,464,120	4,476,306
1916	9,310,268	4,337,563
1917	8,841,875	4,313,670
1918	5,095,124	2,695,935
1919	8,063,578	6,060,853
1920	7,461,355	11,121,864
1921	9,741,711	11,279,253
1922	10,786,280	8,071,889
1923	9,012,356	11,480,499
1924	11,194,173	10,606,870
1925	12,308,274	10,984,516
1926	10,241,172	10,057,705
1927	13,820,289	11,193,268

Turpentine Substitutes (Mineral Spirits)

	Gallons.	Dollars.
1924	1,063,893	425,245
1925	941,047	274,794
1926	1,415,607	348,931
1927	2,788,719	562,335

Turpentine, Wood

	Gallons.	Dollars.
1922	494,576	342,430
1923	397,870	330,827
1924	493,911	425,581
1925	522,660	403,708
1926	707,028	533,164
1927	645,097	462,961

Varnishes, Oil

	Gallons.	Dollars.
1922	376,416	657,117
1923	501,274	876,397
1924	621,296	1,081,136
1925	668,790	1,191,308
1926	674,612	1,176,425
1927	545,941	1,004,942

Varnishes, Other (Including Lacquers)

	Gallons.	Dollars.
1871	54,454	79,292
1881	87,408	156,617
1891	153,365	208,285
1901	606,187	611,459
1913	1,279,777	1,267,860
1914	1,069,501	1,038,864
1915	731,604	682,352
1916	846,362	888,339
1917	891,812	1,104,698
1918	736,949	1,209,762
1919	1,174,664	2,238,384
1920	1,529,592	2,986,950
1921	1,158,025	2,421,889
1922	611,255	1,024,279
1923	379,542	618,389
1924	344,198	579,088
1925	305,252	533,453
1926	485,899	807,433
1927	595,653	1,282,744

Washing Powder and Fluid

	Pounds.	Dollars.
1913	9,923,700	756,762
1914	12,761,958	535,635
1915	14,695,317	635,476
1916	7,875,317	355,926
1917	3,517,441	197,614
1918	4,754,804	243,184
1919	3,984,745	231,786
1920	6,114,816	357,074
1921	4,021,497	267,597
1922	3,346,375	201,609
1923	4,661,606	269,445
1924	4,908,893	276,765
1925	4,679,249	278,682
1926	4,167,617	233,049
1927	5,939,900	321,817

Water Bottles, Rubber, and Fountain Syringes

	Number.	Dollars.
1925	303,808	215,243
1926	270,267	199,256
1927	313,248	215,380

Yeast

	Pounds.	Dollars.
1901	.....	6,809
1917	.....	1,021,651
1918	.....	918,842
1919	.....	1,116,690
1920	.....	868,718
1921	.....	675,203
1922	896,963	96,137
1923	2,750,901	694,543
1924	2,511,815	667,069
1925	3,118,695	803,512
1926	3,375,375	921,374
1927	3,671,944	975,817

Zinc Dross

	Pounds.	Dollars.
1901	.....	164,140
1914	572,477	29,084
1915	10,361,840	557,247
1916	2,526,288	164,649
1917	10,692,766	886,017
1918	31,104,163	2,283,843
1919	26,500,333	1,929,545
1920	4,097,465	269,997
1921	1,095,186	69,298
1922	10,567,684	373,391
1925	14,686,613	743,711
1926	28,689,439	1,454,075
1927	13,557,535	610,011

Not stated for 1923 and 1924.

Zinc Dust

	Pounds.	Dollars.
1922	3,995,124	287,800
1923	5,578,922	400,264
1924	6,143,778	439,669
1925	4,372,803	356,827
1926	3,473,345	331,692
1927	2,445,450	246,112

Zinc Oxide

	Pounds.	Dollars.
1871	1,082,362	48,292
1881	1,281,375	16,405
1891	8,172,000	142,011
1901	9,456,057	412,719
1914	29,197,790	1,215,360
1915	37,580,411	1,808,970
1916	31,222,228	1,960,589
1917	31,486,877	3,096,019
1918	25,862,043	2,750,610
1919	26,051,535	3,024,198
1920	30,925,243	2,895,933
1921	10,149,360	1,016,784
1922	6,726,285	521,964
1923	10,613,881	748,105
1924	7,528,004	607,134
1925	13,583,173	977,271
1926	24,602,425	1,683,800
1927	32,722,818	2,030,332

56-Year Record of Imports into the United States, 1871-1927

The following tables, compiled from official records, give import data, quantity and value for fiscal years to June 30, for all years for which figures are available, down to 1927. Where statistics are missing for any of the years indicated, it is due to the fact that official records were not kept, and the figures are, therefore, unavailable.

Abrasives, Pumice Stone, Unmanufactured

	Tons.	Dollars.
1871	.....	6,448
1881	.....	19,052
1891	.....	52,414
1901	.....	28,618
1913	5,558	44,474
1914	7,065	57,427
1915	6,060	47,469
1916	8,650	69,311
1917	7,205	76,620
1918	3,900	34,062
1919	1,139	17,196
1920	10,933	145,984
1921	4,488	64,213
1922	5,728	59,603
1923	10,339	72,867
1924	8,551	76,035
1925	8,663	88,954
1926	9,775	103,658
1927	7,791	85,797

Abrasives, Pumice Stone, Wholly or Partially Manufactured

	Pounds.	Dollars.
1913	3,845,326	17,417
1914	6,484,875	28,280
1915	6,013,747	27,152
1916	5,616,012	44,186
1917	7,796,173	64,865
1918	3,238,776	34,262
1919	1,746,024	23,168
1920	6,303,302	63,853
1921	6,783,635	79,727
1922	3,871,541	28,457
1923	7,131,452	54,603
1924	5,224,781	37,231
1925	4,410,794	27,017
1926	6,728,267	38,344
1927	5,495,796	31,703

Abrasives, Rottenstone

	Tons.	Dollars.
1919	13	1,486
1920	401	6,125
1921	90	4,747
1922	62	4,306

Not stated after 1922.

Abrasives, Rottenstone, Tripoli and Diatomaceous Earths

	Tons.	Dollars.
1881	.....	3,848
1891	.....	.....
1901	.....	24,556
1913	.....	30,621
1914	.....	20,858
1915	.....	24,796
1916	.....	38,613
1917	.....	23,315
1918	.....	14,551
1923	.....	13,759
1924	300	12,639
1925	147	5,791
1926	171	8,316

Stated separately 1919 to 1922.

Abrasives, Tripoli

	Tons.	Dollars.
1919	247	7,232
1920	411	9,483
1921	324	9,423
1922	320	7,918

Not stated after 1922.

Acenaphthene, Fluorene, Methyl-anthracene and Methyl-naphthalene

	Pounds.	Dollars.
1920	15,759	946
1921	.....	.....
1922	100	64
1923	23,739	2,843
1924	.....	.....
1925	.....	.....
1926	20,000	1,457
1927	52,224	13,791

Acetaldehyde

	Pounds.	Dollars.
1924	64,822	10,815
1925	107,344	18,114
1926	321,125	48,400
1926	323,125	48,400
1927	122	57

Acetanilide, Medicinal, Acetphenetidin and Acetylsalicylic Acid

	Pounds.	Dollars.
1914	1,060	164
1915	800	389
1916	.....	.....
1917	15	22
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	10	16
1922	20	12
1923	20	32
1924	38	50
1925	13	26
1926	95	175
1927	974	2,501

Acetanilide, Not Medicinal

	Pounds.	Dollars.
1927	3,268	1,348

Acetone, Acetone Oil, and Ethyl Methyl Ketone

	Pounds.	Dollars.
1914	2,760	307
1915	235,917	21,105
1916	179,497	14,424
1917	.....	.....
1918	148,082	26,910
1919	443,504	80,986
1920	.....	.....
1921	6,654	311
1922	155	57
1923	44,099	6,910
1924	63,724	9,088
1925	357,896	43,766
1926	325,274	33,893
1927	266,223	28,698

Acetphenetidin (Phenacetin)

	Pounds.	Dollars.
1915	39,990	27,356
1916	203	1,532
1917	3,280	40,352
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	25	238
1925	300	1,020

Included in "Acetanilide, Medicinal," etc., after 1925.

Acid, Acetic Anhydride

	Pounds.	Dollars.
1913	309,645	51,632
1914	150,892	23,240
1915	3,852	1,019
1916	18,177	10,013
1917	9,060	7,485
1918	13,112	16,533
1919	10,948	14,780
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	2,350	638
1924	3,746	1,141
1925	6,208	1,728
1926	129,953	24,274
1927	50,027	12,315

Acid, Acetic or Pyroligneous

	Pounds.	Dollars.
1871	146	120
1881	4,223	942
1891	10,946	1,036
1901	291,801	21,182
1913	39,648	3,036
1914	27,750	1,952
1915	312,850	16,419
1916	504,858	53,969
1917	201,604	28,492
1918	264,997	47,673
1919	1,252,649	224,482
1920	2,925,076	339,178
1921	859,755	108,090
1922	21,774	17,104
1923	269,960	31,325
1924	1,266,548	136,865
1925	2,108,787	239,298
1926	4,519,465	325,703
1927	9,660,854	673,046

Acid, Acetylsalicylic (Aspirin)

	Pounds.	Dollars.
1914	22,841	11,873
1915	112,602	53,792
1916	229	311
1917	501	2,136
1918	1,100	3,300
1919	26	76
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	1	7
1925	.....	.....

Included in "Acetanilide, Medicinal," etc., after 1925.

Acid, Aminosalicylic

	Pounds.	Dollars.
1920	11,199	8,182
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....

Not stated after 1925.

Acid, Arsanilic

	Pounds.	Dollars.
1925	1,092	10,920

Not stated after 1925.

Acid, Arsenic

	Pounds.	Dollars.
1924	110,436	11,174
1925	28,200	1,512
1926	33,402	1,354
1927	210	71

Acid, Arsenious, or White Arsenic

	Pounds.	Dollars.
1882	52,572	2,285
1891	.....	.....
1901	497,916	20,486
1913	5,164,768	203,525
1914	3,034,351	110,179
1915	2,789,531	106,530
1916	2,458,694	104,988
1917	1,984,480	159,429
1918	3,746,246	384,964
1919	7,074,429	611,398
1920	5,809,178	414,867
1921	6,733,163	511,098
1922	1,694,142	109,169
1923	13,235,646	1,225,961
1924	22,007,134	2,092,936
1925	17,363,079	1,187,249
1926	14,422,716	538,782
1927	23,754,152	794,023

Acid, Benzoic, Medicinal

	Pounds.	Dollars.
1871	.....	5,571
1881	8,813	13,299
1891	.....	.....
1901	262,627	93,667
1913	863,015	133,887
1914	278,896	51,701
1915	132,666	25,442
1916	25,155	79,856
1917	13,547	52,988
1918	2,354	16,390
1919	125	1,114
1920	313	1,461
1921	240	165
1922	11,023	2,847
1923	200	775
1924	111	168
1925	431	279
1926	250	200
1927	261	157

Acid, Boric

	Pounds.	Dollars.
1871	1,204,049	185,477
1881	187,053	15,771
1891	666,865	40,919
1901	648,994	23,485
1913	362,400	13,897
1914	527,201	22,390
1915	401,684	18,002
1916	424,219	22,145
1917	404,210	24,590
1918	195,650	14,087
1919	280,935	31,170
1920	253,958	11,165
1921	227,461	19,049
1922	1,046,926	82,785
1923	430,677	29,146
1924	259,837	14,640
1925	335,583	19,663
1926	202,593	13,593
1927	202,780	12,212

Acid, Carbolic

	Pounds.	Dollars.
1871	.....	8,671
1881	115,691	48,691
1891	1,140,924	134,234
1901	1,808,026	260,851

Stated separately for later years.

Acid, Carbolic (Not Phenol)

	Pounds.	Dollars.
1917	495,813	34,355
1918	127,574	11,198
1919	2,021,165	194,589
1920	157,319	13,243
1921	183,709	20,906
1922	315,406	31,675

Not stated after 1922.

Acid, Carbolic (Phenol)

	Pounds.	Dollars.
1913	8,345,631	688,771
1914	8,393,216	531,535
1915	3,106,445	179,685
1916	2,246,256	154,841
1917	772,667	56,878
1918	560,276	62,325
1919	95,861	31,963
1920	30	14
1921	1,260	372
1922	.....	361
1923	623,229	87,833

Stated separately after 1923.

Acid, Carbolic (Phenol) Crystal

	Pounds.	Dollars.
1924	151,421	41,271
1925	139,946	32,446
1926	297,632	66,455
1927	62,255	12,923

Acid, Carbolic, Liquid

	Pounds.	Dollars.
1924	2,815	257
1925	429,239	43,080
1926	46,882	11,095
1927	26,753	5,636

Acid, Chloroacetic

	Pounds.	Dollars.
1927	50	20

Acid, Chromic and Anhydrides

	Pounds.	Dollars.
1871	.....	3
1881	124	89
1891	.....	1,742
1901	46,993	9,881
1913	8,522	1,682
1914	7,778	1,220
1915	6,505	1,394
1916	.....	.....
1917	.....	.....
1918	9,512	1,857
1919	.....	.....
1920	.....	.....
1921	1,100	90
1922	3,969	1,289
1923	7,020	2,481
1924	475	405
1925	34,976	3,455
1926	6,461	2,511
1927	10,174	4,120

Acid, Cinnamic

	Pounds.	Dollars.
1924	112	389
1925	.....	.....

Not stated after 1925.

Acid, Citric

	Pounds.	Dollars.
1871	184,662	105,816
1881	38,983	19,750
1891	45,197	15,482
1901	76,805	23,039
1913	8,677	2,916
1914	652,210	204,347
1915	722,434	447,131
1916	171,877	107,603
1917	157,528	91,463
1918	196,590	126,066
1919	680,147	632,294
1920	1,621,577	1,425,195
1921	770,331	632,780
1922	1,624,892	609,198
1923	575,541	199,522
1924	907,250	263,086
1925	362,341	98,129
1926	292,470	81,753
1927	171,361	44,996

Acid, Cresylic

	Pounds.	Dollars.
1926	3,632,457	195,182
1927	8,742,825	518,817

Acid, Fluoric (Hydrofluoric)

	Pounds.	Dollars.
1901	242	15
1913	12	5
1914	305	22
1915	150	11
1916	17	38
1917	.....	.....
1918	1	1
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	40	9
1924	157	32
1925	.....	.....
1926	10	8
1927	.....	.....

Acid, Formic

	Pounds.	Dollars.
1913	502,685	22,414
1914	1,119,745	48,826
1915	534,895	30,641
1916	131,719	19,627
1917	385,468	95,074
1918	.....	.....
1919	.....	.....
1920	210,021	46,922
1921	413,867	66,775
1922	124,964	11,219
1923	1,145,046	82,228
1924	1,290,637	106,688
1925	1,459,354	106,761
1926	2,086,914	131,643
1927	2,879,023	201,847

Acid, Gallic

	Pounds.	Dollars.
1871	50	70
1881	16	31
1891	.....	.....
1901	21,461	9,704
1913	51,326	17,086
1914	61,635	20,429
1915	41,558	14,992
1916	5,101	1,965
1917	.....	.....
1918	3,643	9,708
1919	22	26
1920	.....	.....
1921	.....	.....
1922	7,750	3,291
1923	6,048	2,743
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Acid, Glycerophosphoric, Salts and Compounds

	Pounds.	Dollars.
1914	24,789	23,066
1915	15,933	17,678
1916	7,668	8,242
1917	5,853	9,249
1918	961	1,884
1919	2,630	6,967
1920	7,143	12,451
1921	8,287	10,229
1922	3,264	2,716
1923	18,952	18,524
1924	42,808	59,400
1925	47,626	54,350
1926	65,266	56,013
1927	47,282	49,780

Acid, Hydrochloric (Muriatic)

	Pounds.	Dollars.
1871	.....	3,595
1881	.....	.....
1891	.....	.....
1901	16,278	430
1913	440	14
1914	254,480	1,450
1915	3,532,076	20,884
1916	4,215,491	27,292
1917	1,108,308	8,191
1918	2,254,210	18,440
1919	3,648,095	37,989
1920	4,454,308	56,828
1921	4,101,080	48,584
1922	7,015	491
1923	154,033	1,502
1924	905,900	8,440
1925	845,227	7,232
1926	1,652,800	10,318
1927	102,495	956

Acid, Lactic

	Pounds.	Dollars.
1913	158,754	19,029
1914	276,237	30,423
1915	143,291	26,787
1916	17,845	10,930
1917	100	160
1918	330	544
1919	.....	.....
1920	17,939	6,517
1921	301,784	77,342
1922	682,392	55,027
1923	182,320	23,792

Subdivided after 1923.

Acid, Lactic, Containing Less Than 30% of Lactic

	Pounds.	Dollars.
1925	12,255	4,354
1926	31,847	3,958
1927	.....	.....

Acid, Lactic, Containing 30% to 55% of Lactic

	Pounds.	Dollars.
1924	192,108	10,963
1925	258,830	13,145
1926	613,873	45,615
1927	404,828	27,559

Acid, Lactic, Containing 55% or More of Lactic

	Pounds.	Dollars.
1924	58,897	12,375
1925	118,946	36,065
1926	77,534	24,956
1927	234,399	76,391

Acid, Nitric

	Pounds.	Dollars.
1871	.....	2,278
1881	.....	45
1891	.....	.....
1901	45,857	934
1913	100	8
1914	.....	.....
1915	356,558	17,776
1916	224,099	11,487
1917	13	2
1918	9,444,028	865,071
1919	8,000,867	589,501
1920	.....	.....
1921	47,754	4,180
1922	23,545	1,970
1923	76,620	3,949
1924	.....	.....
1925	2,067	372
1926	447,058	3,089
1927	1	2

Imports Into the United States

Acid, Nitric and Sulphuric Mixed

	Pounds.	Dollars.
1926	226,472	1,364
1927	150	25

Acid, Oleic or Red Oil

	Pounds.	Dollars.
1924	30,488	4,059
1925	41,943	5,334
1926	31,693	4,257
1927	65,573	6,989

Acid, Oxalic

	Pounds.	Dollars.
1871	414,044	61,613
1881	833,407	69,908
1891	2,743,222	200,395
1901	5,622,900	300,879
1913	8,046,380	402,960
1914	8,780,857	433,783
1915	4,496,679	262,422
1916	522,549	166,117
1917	1,183,256	527,827
1918	757,555	311,290
1919	456,698	154,041
1920	1,375,550	372,982
1921	1,824,867	482,758
1922	22,715	3,314
1923	2,839,217	228,285
1924	2,397,579	169,591
1925	3,196,643	156,608
1926	2,028,302	88,392
1927	1,845,723	89,159

Acid, Phenylglycinorthocarboxylic

	Pounds.	Dollars.
1924	17,376	74,492
1925	.....	.....

Not stated after 1925.

Acid, Phosphoric

	Pounds.	Dollars.
1901	175,910	31,841
1913	504,388	76,907
1914	528,827	63,222
1915	265,193	39,120
1916	71,568	12,937
1917	13,666	4,225
1918	17,711	7,644
1919	6,431	4,186
1920	80,160	27,837
1921	253,700	68,189
1922	197,994	36,941
1923	358,573	45,043
1924	125,350	12,794
1925	201,323	20,182
1926	118,259	13,862
1927	503,532	53,132

Acid, Phthalic

	Pounds.	Dollars.
1901	31,336	17,560
1913	75,695	20,511
1914	63,574	15,597
1915	17,925	4,498
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	2,205	619
1923	.....	.....
1924	.....	.....
1925	.....	.....

Not stated after 1925.

Acid, Pyrogallic

	Pounds.	Dollars.
1901	.....	37,789
1913	9,512	9,278
1914	23,615	20,498
1915	10,564	9,514
1916	169	227
1917	.....	.....
1918	275	547
1919	.....	.....
1920	.....	.....
1921	899	2,094
1922	11	20
1923	232	393
1924	11	24
1925	11	21
1926	.....	.....
1927	.....	.....

Acid, Salicylic, and Salts of, Not Medicinal

	Pounds.	Dollars.
1924	1,100	847
1925	1,757	521

Not stated after 1925.

Acid, Salicylic, and Salts of, Medicinal

	Pounds.	Dollars
1901	222,761	76,786
1913	31,844	6,500
1914	18,821	4,425
1915	82,617	24,402
1916	160	386
1917	5,033	3,114
1918	21,354	20,883
1919	5	2
1920	.....	.....
1921	.....	.....
1922	2,240	1,775
1923	43	113
1924	4	55
1925	561	640
1926	137	3,343
1927	94	637

Acid, Silicic

	Pounds.	Dollars.
1901	25	3
1913	121,344	6,486
1914	.....	.....
1915	3,086	586
1916	15	6
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	110	17
1922	210	32
1923	100	17

Not stated after 1923.

Acid, Stearic

	Pounds.	Dollars.
1891	.....	2,638
1901	.....	.....
1913	119,619	12,160
1914	100,088	9,593
1915	32,795	2,465
1916	40,579	6,029
1917	538	75
1918	.....	.....
1919	.....	.....
1920	4,044	867
1921	12,662	1,750
1922	25,919	2,170
1923	352,150	37,694
1924	292,705	34,506
1925	445,686	58,754
1926	2,391,330	296,741
1927	603,926	71,764

Acid, Sulphuric, or Oil of Vitriol

	Pounds.	Dollars.
1871	8,509	642
1881	3,841	276
1891	15,377	836
1901	79,120	2,335
1913	34,624	512
1914	6,725,959	40,559
1915	7,382,139	44,008
1916	6,286,490	61,352
1917	667,008	6,617
1918	2,822,527	358,904
1919	11,339,480	100,489
1920	9,221,723	79,204
1921	10,365,450	93,937
1922	4,915,213	54,727
1923	18,362,693	158,244
1924	17,196,506	144,376
1925	20,154,502	146,841
1926	50,797,446	327,953
1927	45,050,353	249,312

Acid, Tannic, Containing Less Than 50% Tannic

	Pounds.	Dollars.
1925	27,199	3,828
1926	87,907	14,830
1927	62,522	8,023

Acid, Tannic, Not Medicinal, 50% or More Tannic

	Pounds.	Dollars.
1925	41,284	10,661
1926	63,421	16,628
1927	122,857	33,601

Acid, Tannic, Medicinal, 50% or More Tannic

	Pounds.	Dollars.
1871	21	26
1881	1,041	469
1891	659	239
1901	2,007	1,092
1913	1,540	768
1914	12,892	4,326
1915	49,493	17,047
1916	2,229	684
1917	160	41
1918	5,442	1,424
1919	96,831	41,675
1920	33,458	20,169
1921	46,934	21,735
1922	19,518	8,236
1923	88	75
1924	3	10
1925	.....	.....
1926	.....	.....
1927	1,120	491

Acid, Tartaric

	Pounds.	Dollars.
1871	288,525	85,830
1881	64	33
1891	1,511	468
1901	1,068	299
1913	78,942	15,747
1914	848,575	203,850
1915	820,105	273,880
1916	198,873	84,373
1917	268,180	162,478
1918	384,262	231,099
1919	321,256	218,441
1920	798,667	529,231
1921	2,103,131	1,004,349
1922	3,074,283	756,696
1923	1,878,891	454,047
1924	3,249,082	720,630
1925	2,783,088	568,909
1926	2,847,958	578,880
1927	2,250,908	467,727

Acid, Tetrachlorophthalic

	Pounds.	Dollars.
1925	441	600

Not stated after 1925.

Acid, Valerianic

	Pounds.	Dollars.
1901	1,172	818
1913	1,019	880
1914	1,161	750
1915	2,163	1,774
1916	600	399
1917	50	491
1918	845	5,011
1919	.....	.....
1920	700	2,278
1921	435	1,342
1922	.....	.....
1923	540	827
1924	.....	.....
1925	222	352
1926	62,683	6,699
1927	723	1,057

Acids and Acid Anhydrides, Not Specially Provided For

	Pounds.	Dollars.
1871	.....	93,273
1881	.....	350,080
1891	.....	380,054
1901	.....	42,838
1913	.....	86,539
1914	.....	94,078
1915	.....	73,848
1916	.....	36,430
1917	.....	85,257
1918	.....	510,091
1919	14,025	58,915
1920	52,758	25,200
1921	106,746	28,096
1922	226,956	57,361
1923	1,306,932	92,725
1924	116,701	15,202
1925	96,839	21,639
1926	1,403,585	196,723
1927	858,567	131,375

Aconite

	Pounds.	Dollars.
1871	19,591	1,586
1881	5,883	455
1891	2,761	266
1901	1,130	113
1913	12,946	1,065
1914	4,267	321
1915	8,821	962
1916	6,720	538
1917	34,285	8,724
1918	475	119
1919	22,320	4,462
1920	31,471	8,881
1921	10,854	2,452
1922	10,645	1,367
1923	25,464	5,262
1924	37,330	10,775
1925	21,730	5,340
1926	25,724	4,568
1927	115,963	31,613

Aconitine, Salts and Derivatives

	Ounces.	Dollars.
1925	18	232

Not stated after 1925.

Acorns, Crude

	Pounds.	Dollars.
1913	7,165	210
1914	3,613	208
1915	4,395	198
1916	.....	.....
1917	2,420	41
1918	550	36
1919	.....	.....
1920	22,680	900
1921	1,048	98
1922	.....	.....
1923	.....	.....
1924	1,784,481	65,122
1925	4,006,771	142,471
1926	3,670,800	116,918
1927	2,292,358	59,148

Acorns, Ground or Prepared

	Pounds.	Dollars.
1925	805,675	35,984
1926	463,025	19,787
1927	656,962	29,560

Agar-Agar

	Pounds.	Dollars
1914	189,232	54,319
1915	344,119	92,809
1916	332,931	110,410
1917	431,622	162,527
1918	246,988	91,442
1919	338,307	172,832
1920	443,116	247,404
1921	199,584	98,722
1922	417,979	185,139
1923	372,380	337,876
1924	412,113	435,236
1925	525,038	499,479
1926	372,368	291,341
1927	428,295	285,556

Albumen, Egg or Blood

	Pounds.	Dollars.
1871	.....	135,017
1881	.....	215,555
1891	.....	119,441
1901	396,314	110,702
1913	1,246,744	406,594
1914	1,574,271	487,905

Stated separately after 1914; see following classes.

Albumen, Egg, Dried

	Pounds.	Dollars.
1915	1,269,398	402,996
1916	1,670,996	751,976
1917	2,669,254	1,443,936
1918	3,727,998	2,450,143
1919	1,427,240	1,141,431
1920	4,716,241	5,184,229
1921	2,568,240	2,606,352
1922	2,911,347	1,494,659
1923	2,371,447	1,302,156
1924	3,172,794	1,939,708
1925	3,147,661	2,280,208
1926	3,421,869	2,676,698
1927	3,777,481	2,516,184

Albumen, Egg, Frozen or Otherwise Prepared

	Pounds.	Dollars.
1915	691,081	92,307
1916	1,451,376	201,509
1917	2,989,685	316,762
1918	2,014,629	250,132
1919	1,744,511	197,658
1920	2,875,639	587,368
1921	4,461,999	618,953
1922	3,844,804	475,976
1923	3,039,965	500,341
1924	1,328,892	163,901
1925	2,929,570	348,831
1926	3,879,912	471,930
1927	3,102,312	429,039

Albumen, Not Otherwise Provided For

	Pounds.	Dollars.
1913	15,831	3,421
1914	382,589	58,175
1915	258,057	48,941
1916	81,787	25,615
1917	106,200	34,057
1918	671	266
1919	1,242	768
1920	37,030	21,395
1921	7,651	3,707
1922	103,481	31,130
1923	186,315	51,212
1924	218,756	47,036
1925	150,527	50,216
1926	198,288	73,809
1927	294,573	101,226

Alcohol, Amyl

	Pounds.	Dollars.
1924	26,508	12,377
1925	53,075	17,505
1926	5,354	2,105
1927	4,307	1,173

Alcohol, Butyl

	Pounds.	Dollars.
1924	896,265	201,698
1925	974,047	213,176
1926	1,489,113	239,894
1927	17,428	2,619

Alcohol, Ethyl (Pure Grain)

	Proof gallons.	Dollars.
1891	8,794	7,623
1901	.....	.....
1913	135,250	22,780
1914	109,830	19,365
1915	40,532	5,707
1916	59,198	7,285
1917	4	8
1918	69	20
1919	290	289
1920	.....	.....
1921	27	34
1922	.....	.....
1923	3	2
1924	.....	.....
1925	8	10
1926	.....	.....
1927	120	648

Alcohol, Ethyl (Denatured)

	Proof gallons.	Dollars.
1926	375	260
*1927	60,536	32,500

*Product of Virgin Islands.

Alcohol, Methyl

(See Methanol)

Alcohol, Propyl

	Pounds.	Dollars.
1925	32,433	11,692
1926	8,623	2,954
1927	40,079	9,157

Aldol or Acetaldol

	Pounds.	Dollars.
1927	220	44

Alizarin, Natural or Artificial, and Dyes Derived Therefrom

	Pounds.	Dollars.
1881	.....	898,539
1891	344,492	674,919
1901	4,046,986	713,392
1913	8,219,087	1,824,973
1914	806,764	246,196

Stated as following class after October 3, 1913.

Alizarin and Derivatives, Natural or Synthetic, and Dyes Derived from

	Pounds.	Dollars.
1914	1,828,074	599,648
1915	5,992,878	1,586,367
1916	71,834	44,282
1917	99,057	127,240

Stated separately after 1917.

Alizarin Assistant, Etc., and Soaps Containing Castor Oil

	Pounds.	Dollars.
1891	1,469	818
1901	24,716	11,335
1913	137,187	62,923
1914	186,234	72,430
1915	48,376	18,820
1916	7,382	4,134
1917	5,193	3,010
1918	24	24
1919	47,008	32,121
1920	27	29
1921	1,147	711
1922	1,187	708
1923	15,802	1,855
1924	29,310	2,319
1925	24,879	2,119
1926	40,538	5,017
1927	225,857	7,460

Quantity stated in gallons prior to 1923.

Alizarin, Natural

	Pounds.	Dollars.
1918	115,133	160,775
1919	1,741	5,155
1920	4,943	3,457
1921	77,551	62,404
1922	62,928	116,773
1923	14,795	25,323
1924	8,286	12,754
1925	2,961	9,531
1926	3,372	5,022
1927	1,129	1,498

Alizarin, Synthetic

	Pounds.	Dollars.
1918	19,180	55,179
1919	.....	.....
1920	58,810	18,785
1921	122,246	45,221
1922	36,736	18,510
1923	15,175	17,052
1924	.....	.....
1925	3,002	12,008
1926	.....	.....
1927	1,406	711

Alizarin Colors or Color Lakes

	Pounds.	Dollars.
1918	2,540	11,208
1919	6,284	9,121
1920	19,634	17,161
1921	144,076	204,859
1922	61,452	46,411

Not stated after 1922.

Alizarin Dyes

	Pounds.	Dollars.
1918	2,759	10,698
1919	4,025	3,397
1920	19,393	9,475
1921	89,011	117,983
1922	328,900	529,562

Not stated after 1922.

Alizarin Colors and Dyes

	Pounds.	Dollars.
1923	246,550	385,490
1924	259,589	322,611
1925	19,668	34,616
1926	25,651	62,654
1927	48,520	48,246

Aloes, Crude

	Pounds.	Dollars.
1871	204,272	25,710
1881	171,303	24,878
1891	372,764	22,532
1901	841,130	29,048
1913	909,279	77,938
1914	918,402	64,983
1915	953,186	90,081
1916	1,597,811	152,140
1917	1,236,381	97,607
1918	1,230,595	95,846
1919	1,544,940	127,857
1920	1,771,344	178,048
1921	966,423	78,456
1922	955,009	58,454
1923	1,528,792	82,264
1924	901,698	80,616
1925	1,182,430	96,557
1926	1,148,548	102,564
1927	1,189,742	107,312

Alumina Hydroxide (Refined Bauxite)

	Pounds.	Dollars.
1901	4,584,477	199,950
1913	2,252,156	37,812
1914	1,639,027	26,328
1915	202,968	3,680
1916	418	260
1917	.....	.....
1918	94,278	7,562
1919	.....	.....
1920	.....	.....
1921	2,549	963
1922	15,816	569
1923	2,083,043	57,328
1924	672,629	35,655
1925	543,093	40,847
1926	445,584	29,246
1927	210,065	17,304

Alum, Alum Cake, Patent Alum, Sulphate of Alumina and Aluminous Cake

	Pounds.	Dollars.
1871	4,712,840	74,450
1881	2,086,950	22,331
1891	4,652,985	58,864
1901	2,120,119	21,179
1913	4,129,160	39,944
1914	4,119,481	47,759
1915	3,904,551	41,166
1916	2,482,663	45,491
1917	1,636,989	66,768
1918	996,798	32,779
1919	220,967	7,915
1920	1,062,041	37,777
1921	3,069,682	71,135
1922	3,795,551	71,721
1923	2,750,253	48,192

Stated separately after 1923.

Imports Into the United States

Aluminum Sulphate, Alum Cake, or Aluminous Cake

	Pounds.	Dollars.
1924	197,085	3,141
1925	1,577,174	17,661
1926	1,929,100	20,704
1927	1,677,660	21,996

Aluminum, Crude, Scrap, and Alloy

	Pounds.	Dollars.
1871	.....	341
1881	517	6,071
1891	10,383	15,582
1901	62,342	29,198
1913	26,642,112	4,247,580
1914	16,421,076	2,801,911
1915	13,925,919	2,364,044
1916	8,203,895	1,823,106
1917	1,904,000	558,897
1918	1,503,360	480,782
1919	5,548,784	1,748,691
1920	30,853,386	9,595,122
1921	35,626,274	9,015,422
1922	24,697,080	4,805,767
1923	47,619,231	8,541,049
1924	36,923,348	6,609,026
1925	26,191,182	5,998,045
1926	66,470,355	15,430,256
1927	67,666,489	15,072,461

Aluminum Leaf

	*Leaves (5½x5½ inches)	Dollars.
1891	9,768	1,109
1901	102	66
1913	3,531	1,811
1914	1,385	141
1915	15,249	1,901
1916	39,920	5,466
1917	19,161	3,706
1918	50,880	11,636
1919	95,475	19,445
1920	118,159	25,572
1921	243,510	65,759
1922	87,359	10,143
1923	362,206	27,583
1924	283,149	22,563
1925	21,153,667	29,535
1926	26,854,330	38,968
1927	23,205,671	31,818

* Quantity stated as 100 leaves prior to 1925.

Aluminum Foil

	Pounds.	Dollars.
1924	20,553	17,466
1925	31,932	22,473
1926	135,036	109,615
1927	477,149	252,896

Aluminum Powder and Powdered Foil

	Pounds.	Dollars.
1924	123,723	63,544
1925	68,891	31,784
1926	79,849	40,329
1927	104,906	42,578

Aluminum Salts and Compounds, N.E.S.

	Pounds.	Dollars.
1925	27,297	9,426
1926	92,206	30,983
1927	337,333	27,736

Ambergris Containing Less Than 10 Per Cent. Alcohol

	Pounds.	Dollars.
1881	.....	55
1891	71	3,731
1901	27	4,266
1913	608	10,964
1914	32	695
1915	1	87
1917	160	2,771
1918	204	3,643
1919	494	1,097
1920	48	540
1921	20	916
1922	100	12,635
1923	32	4,355
1924	53	10,927
1925	211	78,868
1926	110	26,262
1927	365	56,251

Aminonaphthol, Aminophenol and Aminophenetol

	Pounds.	Dollars.
1919	590	1,475
1920	438	942
1921	14,623	11,699
1922	.....	.....
1923	32	4,355
1924	.....	.....
1925	.....	.....
1926	400	497
1927	.....	.....

Ammonia Aldehyde

	Pounds.	Dollars.
1924	20	8
1925	2,094	796
1926	910	348
1927	253	78

Ammonia, Carbonate and Bicarbonate

	Pounds.	Dollars.
1871	1,346,448	112,303
1881	315,537	42,363
1891	912,886	62,293
1901	181,701	12,204
1913	258,376	16,173
1914	391,981	25,195
1915	784,821	49,122
1916	357,280	25,018
1917	244,840	18,264
1918	76,160	6,732
1919	85,762	15,757
1920	271,787	32,288
1921	238,820	21,397
1922	742,067	38,005
1923	742,849	43,816
1924	825,476	48,256
1925	737,544	43,723
1926	625,555	39,322
1927	671,811	42,596

Ammonia, Chloride (Sal Ammoniac)

	Pounds.	Dollars.
1871	1,083,496	79,551
1881	1,281,867	107,976
1891	3,609,583	195,078
1901	4,772,364	245,163
1913	10,387,148	504,330
1914	9,254,539	470,566
1915	4,788,325	241,713
1916	1,965,464	122,174
1917	1,856,696	178,274
1918	1,000,262	97,994
1919	648,941	92,942
1920	5,295,692	563,130
1921	4,502,058	445,705
1922	6,647,610	338,555
1923	3,240,055	174,996
1924	4,073,043	193,574

Stated separately after 1925.

Ammonia, Chloride, Gray

	Pounds.	Dollars.
1925	2,230,667	100,919
1926	864,627	33,676
1927	2,039,798	79,360

Ammonia, Chloride, White

	Pounds.	Dollars.
1925	9,488,578	420,100
1926	10,014,027	403,078
1927	15,714,506	590,225

Ammonia, Liquid Anhydrous

	Pounds.	Dollars.
1891	14,210	5,870
1901	.....	.....
1913	.....	.....
1914	.....	.....
1915	807	35
1916	.....	.....
1917	200	46
1918	2,698	1,039
1919	.....	.....
1920	12,512	4,805
1921	14,038	6,120
1922	102	48
1923	107,844	4,203
1924	11,033	560
1925	176	26
1926	400	16
1927	.....	.....

Ammonia, Nitrate

	Pounds.	Dollars.
1914	2,766,000	132,849
1915	2,274,000	193,907
1916	.....	.....
1917	87,300	4,015
1918	74,101	4,287
1919	15,755	1,871
1920	18,292,080	1,360,153
1921	28,417,403	1,823,363
1922	44,724,215	2,628,308
1923	22,732,660	1,433,472
1924	1,747,333	98,686
1925	10,077,410	266,329
1926	11,659,352	576,765
1927	10,453,895	432,537

Ammonia, Perchlorate

	Pounds.	Dollars.
1914	70,253	6,337
1915	72,576	6,515
1916	.....	.....
1917	275	53
1918	465	165
1919	1,768	402
1920	452,356	85,649
1921	4,502,050	413,470
1922	3,888,039	298,780
1923	496,683	23,635
1924	890,735	29,046
1925	106,501	7,233
1926	448	52
1927	23,467	1,942

Ammonia, Phosphate

	Pounds.	Dollars.
1913	7,433	493
1914	205,764	13,462
1915	71,782	5,394
1916	810	40
1917	1,000	206
1918	1,316	336
1919	.....	.....
1920	.....	.....
1921	14,232	1,787
1922	27,947	2,980
1923	409,182	38,556
1924	57,387	6,246
1925	100,480	9,922
1926	147,664	15,289
1927	491,111	23,812

Ammonia, Sulphate

	Tons.	Dollars.
1891	9,950	483,196
1901	14,846	694,454
1913	61,113	3,660,064
1914	83,597	4,900,058
1915	64,417	3,215,139
1916	19,404	1,371,007
1917	8,176	647,271
1918	3,983	467,999
1919	1,964	288,469
1920	2,586	343,107
1921	2,537	226,300
1922	6,356	314,269
1923	1,879	121,673
1924	5,851	337,032
1925	21,188	1,198,428
1926	13,340	724,067
1927	3,479	205,508

Ammonia Sulphate-Nitrate

	Tons.	Dollars.
1927	12,206	815,276

Ammonium-Aluminum Sulphate or Ammonia Alum

	Pounds.	Dollars.
1924	254,075	4,881
1925	79,341	1,323
1926	245,812	5,026
1927	210,678	3,566

Anilin Oil

	Pounds.	Dollars.
1871	.....	100
1881	69,899	18,556
1891	1,489,908	299,662
1901	1,530,950	143,268
1913	2,015,318	171,047
1914	1,444,772	116,628
1915	1,407,305	240,165
1916	104,836	28,130
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	220	72
1922	11,243	1,799

Not stated after 1922.

Anilin Salts

	Pounds.	Dollars.
1881	.....	66,152
1891	.....	713,732
1901	7,575,515	589,535
1913	4,976,108	371,198
1914	3,083,467	222,728
1915	895,439	130,280
1916	16,084	3,978
1917	.....	.....
1918	21,273	3,250
1919	.....	.....
1920	.....	.....
1921	4	1
1922	18,316	12,109

Not stated after 1922.

Anilin Oil and Salts

	Pounds.	Dollars.
1923	85	231
1924	.....	.....
1925	.....	.....
1926	500	130
1927	1,440	1,404

Annatto, and All Extracts of

	Pounds.	Dollars.
1871	.....	32,657
1881	270,597	37,639
1891	696,429	25,724
1901	412,125	13,498
1913	405,024	19,991
1914	507,250	25,341
1915	809,908	53,174
1916	603,271	69,811
1917	669,445	78,017
1918	749,782	73,294
1919	205,059	12,549
1920	917,932	38,927
1921	697,333	25,133
1922	856,731	34,226
1923	478,479	35,702
1924	265,691	53,202
1925	496,036	65,589
1926	570,543	39,608
1927	660,490	31,377

Anthracene and Anthracene Oil

	Dollars.
1914	32,175
1915	49,949
1916	2,551
1917	2,258

Stated separately after 1917; see following classes.

Anthracene

	Pounds.	Dollars.
1918	.....	.....
1919	95,025	3,008

Stated separately after 1919; see below.

Anthracene, Purity Less Than 30 Per Cent

	Pounds.	Dollars.
1920	7,551	506
1921	197,367	17,012
1922	89,592	687
1923	240,380	8,045
1924	859,217	22,373
1925	514,561	9,394
1926	468,385	8,619
1927	23,241	589

Anthracene, Purity of 30 Per Cent. or More

	Pounds.	Dollars.
1920	30,439	7,018
1921	822,740	98,448
1922	.....	.....
1923	2	2
1924	.....	.....
1925	.....	.....
1926	323	126
1927	.....	.....

Anthracene Oil

	Gallons.	Dollars.
1918	11,900	2,010
1919	11,185	2,260
1920	12,394	3,294
1921	18,405	6,725
1922	8,513	2,050
1923	26,845	5,401
1924	22,995	5,670
1925	17,343	2,842
1926	14,538	2,140
1927	9,623	1,044

Anthracene and Carbazole Derivatives (except oil) and Colors and Dyes Derived Therefrom

	Pounds.	Dollars.
1917	329,300	426,198
1918	35,733	28,018
1919	65,898	82,720
1920	84,751	120,774
1921	464,042	704,954
1922	430,282	528,746
1923	285,744	305,836
1924	4,276	4,330
1925	.....	.....
1926	.....	.....
1927	.....	.....

Anthraquinone, Aminoanthraquinone, Nitroanthraquinone

	Pounds.	Dollars.
1920	3,147	2,643
1921	46,327	21,422
1922	93,153	62,445
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	6,625	7,914
1927	6,808	5,705

Antimony Oxide, Salts and Compounds

	Pounds.	Dollars.
1913	1,819,323	97,447
1914	2,623,084	248,164
1915	1,797,265	219,605
1916	511,848	109,814
1917	192,099	46,190
1918	37,724	13,744
1919	267,885	11,378
1920	569,052	20,274
1921	315,427	18,256
1922	63,298	5,859
1923	3,579,780	245,110

Stated separately after 1923.

Antimony Oxide

	Pounds.	Dollars.
1924	2,236,424	134,072
1925	1,157,274	113,080
1926	3,398,895	433,406
1927	3,260,344	366,640

Antimony Sulphides, Red and Golden

	Pounds.	Dollars.
1924	147,241	26,872
1925	248,060	29,215
1926	1,027,463	69,452
1927	907,136	62,968

Antimony Salts and Compounds, N. E. S.

	Pounds.	Dollars.
1924	953,062	69,134
1925	989,783	83,314
1926	356,947	32,714
1927	80,015	15,135

Antipyrin

	Pounds.	Dollars.
1914	7,686	11,603
1915	606	1,085
1916	222	2,202
1917	6,429	46,110
1918	22,736	92,653
1919	14,487	160,902
1920	15,656	72,556
1921	3,886	16,194
1922	7,006	10,293
1923	12,688	18,897
1924	12,993	18,129
1925	10,502	11,748
1926	11,327	10,611
1927	44,984	41,323

Antitoxins, Vaccines, Serums, Viruses and Bacterins for Therapeutic Purposes

	Ounces.	Dollars.
1913	.....	5,032
1914	.....	19,019
1915	.....	12,826
1916	.....	8,225
1917	.....	11,460
1918	.....	6,009
1919	.....	6,076
1920	.....	6,907
1921	.....	7,314
1922	.....	2,645
1923	.....	5,866
1924	1,232	1,489
1925	9,823	21,016
1926	2,707	2,463
1927	6,848	16,855

Apatite

	Tons.	Dollars.
1901	152	2,004
1913	2,930	22,535
1914	92	796
1915	.....	.....
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	29	825
1920	70	2,648
1921	72	2,280
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Apricot and Peach Kernels

	Pounds.	Dollars.
1913	18,769	3,085
1914	17,800	2,862
1915	67,164	3,898
1916	11,926	2,497
1917	250,075	21,430
1918	231,465	16,932
1919	72,228	12,411
1920	22,177	9,051
1921	73,479	12,733
1922	11,217	1,343
1923	221,462	9,854
1924	706	188
1925	73,091	12,283
1926	60,478	16,951
1927	2,942	724

Argols or Crude Tartar, or Wine Lees, Crude

	Pounds.	Dollars.
1871	4,024,731	590,453
1881	13,712,528	2,195,420
1891	21,631,507	2,199,263
1901	29,116,816	2,527,281
1913	29,476,172	2,621,491
1914	5,712,667	545,106

Class dropped under 1913 tariff; see below.

Argols or Crude Tartar, or Wine Lees, Crude or Partly Refined (Bitartrate of Potash)

	Pounds.	Dollars.
1914	23,810,048	2,654,618
1915	28,814,957	3,122,328
1916	34,602,184	5,233,516
1917	24,142,073	3,886,554
1918	30,364,538	5,312,836
1919	32,399,932	5,336,939
1920	25,578,221	3,282,815
1921	26,569,756	3,042,334
1922	18,744,192	1,216,700
1923	21,949,727	1,738,874
1924	17,578,935	1,237,653
1925	20,646,972	1,387,637
1926	26,260,293	1,789,044
1927	22,411,194	1,749,692

Arnica

	Pounds.	Dollars.
1924	65,296	4,266
1925	48,019	3,674
1926	21,616	2,295
1927	23,503	4,106

Arrowroot

	Pounds.	Dollars.
1871	592,318	28,889
1881	69,206	8,910
1891	452,980	17,136
1901	64,601	3,903
1913	11,327	888
1914	8,615	816
1915	134	5
1916	5,987	302
1917	30,776	1,613
1918	15,998	2,993
1919	53,752	7,208
1920	1,454,626	73,347
1921	133,361	11,214
1922	1,720	229
1923	7,166	877
1924	13,404	1,842
1925	16,682	4,572
1926	20,698	3,149
1927	24,918	3,522

Arsenic, Metallic

	Pounds.	Dollars.
1924	207,308	40,501
1925	124,817	27,901
1926	201,987	42,060
1927	102,577	20,508

Arsenic Sulphide, Realgar, and Orpiment

	Pounds.	Dollars.
1871	1,329,698	29,822
1881	2,225,425	54,056
1891	5,343,229	161,367
1901	5,936,629	278,537
1913	8,475,592	354,284
1914	4,148,928	169,614
1915	3,981,661	178,756
1916	2,794,254	122,795
1917	2,373,701	175,811
1918	7,691,028	654,282
1919	7,068,146	563,335
1920	6,470,700	472,710
1921	8,801,293	794,215
1922	7,520,571	471,296
1923	4,817,324	429,959
1924	474,571	51,300
1925	488,092	50,180
1926	963,908	55,108
1927	495,990	35,610

Imports Into the United States

Artists' Colors, in Tubes, Pans, Cakes, Etc.

		Dollars.
1913	.....	136,894
1914	.....	211,305
1915	.....	186,728
1916	.....	129,653
1917	.....	163,958
1918	.....	91,220
1919	.....	85,800
1920	.....	126,026
1921	.....	236,802
1922	.....	187,635
1923	.....	214,539

Subdivided after 1923.

Artists' Colors, N. E. S. Not Assembled in Sets, Kits, Etc.

	Pounds.	Dollars.
1924	134,512	140,596
1925	155,071	154,575
1926	214,166	210,956
1927	326,193	259,176

Artists' Colors, N. E. S. Assembled in Sets, Kits, Etc.

	Pounds.	Dollars.
1924	45,291	16,702
1925	52,898	13,166
1926	70,179	18,531
1927	59,991	19,906

Ashes, Wood, and Beet Root

	*Tons.	Dollars.
1871	.....	40
1881	.....	8,622
1891	.....	42,624
1901	.....	76,306
1913	.....	36,493
1914	.....	27,884
1915	.....	41,522
1916	.....	43,839
1917	.....	55,226
1918	.....	47,932
1919	7,302,539	49,276
1920	8,537,614	44,175
1921	6,212,848	38,609
1922	5,043,755	23,172
1923	6,431,498	29,818
1924	2,325	34,717
1925	1,804	20,453
1926	1,685	16,141
1927	1,478	14,957

* Quantity stated in pounds prior to 1924.

Asphalt and Bitumen

	Tons.	Dollars.
1871	1,302	14,760
1881	12,883	95,410
1891	78,039	251,137
1901	501,310	204,810
1913	188,725	750,685
1914	45,876	171,981
1915	79,561	465,717
1916	130,039	700,940
1917	161,622	896,989
1918	139,618	851,633
1919	95,214	595,796
1920	91,503	685,908
1921	128,913	1,307,290
1922	8,099	118,953
1923	134,224	1,101,097
1924	116,040	1,063,500
1925	125,456	1,071,850
1926	78,663	583,947
1927	163,844	1,359,459

Asphalt, Limestone-Rock

	Tons.	Dollars.
1924	3,563	24,365
1925	4,527	52,903
1926	7,521	79,814
1927	100	1,405

Atropine and Its Salts, Other Than Coal Tar

	Ounces.	Dollars.
1924	400	840
1925	225	452

Not stated after 1925.

Balm of Gilead

	Pounds.	Dollars.
1919	380	9
1920	50	4
1921	160	90
1922	83	25
1923	406	113
1924	.....	.....
1925	551	98
1926	.....	.....
1927	.....	.....

Balsam Copaiba, Crude

	Pounds.	Dollars.
1871	96,283	34,114
1881	143,258	67,816
1891	171,834	63,253
1901	212,082	57,018
1913	206,447	66,361
1914	245,435	71,339
1915	273,616	59,921
1916	204,464	70,868
1917	308,545	124,122
1918	373,362	202,847
1919	300,659	130,967
1920	426,071	171,398
1921	260,769	89,792
1922	239,922	42,703
1923	223,212	38,408
1924	120,411	18,509
1925	253,002	75,058
1926	161,498	40,585
1927	171,862	46,949

Balsam, Fir or Canada, Crude

	Pounds.	Dollars.
1871	.....	3,227
1881	15,510	3,033
1891	34,318	6,858
1901	20,728	5,948
1913	3,691	1,827
1914	13,864	12,505
1915	18,610	14,636
1916	7,113	3,934
1917	4,176	3,897
1918	3,698	1,404
1919	2,344	2,140
1920	2,763	3,570
1921	2,006	3,223
1922	1,455	1,501
1923	3,856	3,889
1924	3,794	4,120
1925	2,267	2,577
1926	4,201	4,638
1927	6,958	7,578

Balsam, Peru, Crude

	Pounds.	Dollars.
1871	2,237	3,878
1881	6,561	7,539
1891	10,653	13,104
1901	.....	.....
1913	48,996	61,702
1914	25,021	29,701
1915	27,506	32,735
1916	40,657	112,270
1917	58,933	175,355
1918	44,082	115,035
1919	64,879	163,568
1920	57,752	176,788
1921	50,089	98,422
1922	57,328	69,116
1923	56,414	68,311
1924	55,711	74,841
1925	55,270	74,011
1926	47,870	62,741
1927	54,525	71,806

Balsam, Styrax, Crude

	Pounds.	Dollars.
1891	3,432	583
1901	3,325	517
1913	35,861	5,223
1914	5,607	798
1915	11,445	1,550
1916	11,696	5,528
1917	10,892	26,550
1918	14,788	22,616
1919	.....	.....
1920	3,678	3,004
1921	30,445	67,120
1922	7,589	5,159
1923	26,825	10,464
1924	28,182	9,255
1925	44,336	14,050
1926	9,665	2,588
1927	27,792	12,218

Balsam, Tolu, Crude

	Pounds.	Dollars.
1871	15,275	6,516
1881	39,995	18,791
1891	54,244	12,264
1901	56,785	12,010
1913	57,277	29,552
1914	42,138	19,063
1915	39,750	13,993
1916	63,579	17,233
1917	62,820	18,255
1918	46,869	23,596
1919	58,194	44,606
1920	88,829	90,974
1921	27,871	23,101
1922	44,359	22,615
1923	51,087	24,008
1924	37,561	29,082
1925	46,627	41,393
1926	46,576	41,814
1927	42,994	28,153

Balsam, All Other, Crude

	Pounds.	Dollars.
1871	.....	3,227
1881	.....	315
1891	36,329	5,024
1901	54,994	29,231
1913	46,000	12,149
1914	33,311	12,410
1915	5,999	4,214
1916	2,503	1,312
1917	12,649	4,235
1918	34,773	48,560
1919	42,817	60,338
1920	17,330	8,354
1921	31,149	31,992
1922	45,271	20,657
1923	84,048	38,739
1924	22,493	17,552
1925	33,699	24,175
1926	47,764	17,475
1927	22,787	10,519

Barium Carbonate, Precipitated

	Pounds.	Dollars.
1913	2,182,517	20,143
1914	4,995,451	46,425
1915	344,588	7,864
1916	6	2
1917	804	177
1918	106,288	1,437
1919	.....	.....
1920	163,509	18,268
1921	1,816,693	45,859
1922	7,806,346	133,185
1923	8,483,442	185,743
1924	4,930,372	93,973
1925	10,489,859	144,488
1926	20,604,111	204,975
1927	11,161,255	128,309

Barium Chloride

	Pounds.	Dollars.
1912	2,926,159	26,341
1914	6,110,386	64,563
1915	4,686,029	60,532
1916	50	10
1917	6,614	608
1918	.....	.....
1919	3,290	733
1920	2,520,321	81,988
1921	2,779,966	113,695
1922	4,905,453	81,713
1923	3,907,046	129,392
1924	2,852,789	56,871
1925	4,971,295	95,613
1926	4,374,363	60,179
1927	3,447,493	52,848

Barium Dioxide (Binoxide)

	Pounds.	Dollars.
1913	3,507,508	215,500
1914	6,085,798	329,139
1915	4,084,144	317,262
1916	546,442	48,451
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	70,862	12,367
1921	684,640	89,138
1922	1,917,370	179,057
1923	2,140,050	188,574
1924	1,777,598	144,164
1925	1,580,154	91,768
1926	484,796	27,497
1927	14,407	1,445

Barium Hydroxide

	Pounds.	Dollars.
1924	375,553	9,792
1925	239,368	5,611
1926	225,130	5,162
1927	561,209	13,237

Barium Nitrate

	Pounds.	Dollars.
1924	1,184,313	75,780
1925	886,891	39,020
1926	1,450,933	58,789
1927	1,109,858	48,397

Barks in Crude State, Not Edible

	Pounds.	Dollars.
1901	.....	15,478
1919	400,367	51,274
1920	2,772,957	175,903
1921	4,272,993	242,177
1922	2,627,953	72,092
1923	1,644,663	32,591
1924	266,523	16,020
1925	254,961	27,781
1926	156,334	24,210
1927	113,502	20,139

Bark, Cinchona or Other, from Which Quinine May Be Extracted

	Pounds.	Dollars.
1871	1,286,095	697,547
1881	4,219,403	1,846,280
1891	2,672,364	301,085
1901	4,196,419	781,895
1913	3,329,973	354,593
1914	3,654,968	464,411
1915	3,951,196	561,802
1916	3,967,320	777,637
1917	2,531,397	685,936
1918	3,121,958	779,403
1919	3,866,158	803,081
1920	5,242,724	1,132,874
1921	3,566,010	1,334,758
1922	766,589	276,833
1923	3,443,491	1,110,142
1924	2,421,915	691,842
1925	2,538,989	774,252
1926	4,203,292	1,198,580
1927	2,217,951	695,872

Bark, Hemlock

	*Pounds.	Dollars.
1871	.....	98,207
1881	102,932	492,561
1891	57,255	274,426
1901	16,749	65,313
1913	5,502	31,965
1914	4,483	25,655
1915	3,672	19,967
1916	3,388	17,855
1917	1,118	7,027
1918	270	2,624
1919	969	9,716
1920	2,481	29,454
1921	2,838	32,248
1922	3,205	31,492
1923	5,505	38,166
1924	9,150,882	47,226
1925	5,977,624	33,808
1926	4,561,050	21,043
1927	7,454,431	33,431

* Quantity stated in tons prior to 1924.

Bark, Mangrove

	*Pounds.	Dollars.
1913	17,578	374,506
1914	7,743	191,472
1915	8,326	222,066
1916	21,107	581,190
1917	10,565	297,897
1918	3,529	72,956
1919	2,817	125,603
1920	2,544	109,085
1921	7,156	344,413
1922	1,668	40,857
1923	8,906	199,724
1924	1,785	36,649
1925	1,867	47,030
1926	12,783,651	213,051
1927	9,186,778	104,089

*Quantity stated in tons prior to 1926.

Bark, Wattle

	Pounds.	Dollars.
1924	15,123,490	190,565
1925	12,306,002	199,328
1926	21,687,515	411,474
1927	24,115,673	481,701

Baryta, Sulphate of, or Barytes, Unmanufactured

	Tons.	Dollars.
1871	693	9,769
1881	.....	.....
1891	2,112	4,852
1901	2,775	6,959
1913	28,358	63,345
1914	32,550	63,270
1915	9,616	21,087
1916	15	245
1917	.....	.....
1918	5	63
1919	35	245
1920	2,058	10,405
1921	23,238	156,987
1922	9,500	64,763
1923	19,500	89,951

See following classes after 1923.

Baryta, Sulphate of, or Barytes, Manufactured

	Tons.	Dollars.
1891	1,812	19,196
1901	1,802	19,795
1913	4,594	36,819
1914	5,379	42,627
1915	1,755	14,997
1916	.....	2
1917	210	3,813
1918	.....	.....
1919	.....	.....
1920	107	653
1921	569	10,519
1922	1,579	24,440
1923	5,841	90,450

See following classes after 1923.

Barytes, Crude

	Tons.	Dollars.
1924	18,752	116,534
1925	22,473	119,879
1926	27,978	103,020
1927	60,535	277,729

Barytes, Ground or Manufactured

	Tons.	Dollars.
1924	4,235	65,388
1925	2,602	38,551
1926	2,667	38,920
1927	3,179	45,730

Bauxite, Crude

	Tons.	Dollars.
1901	16,763	63,597
1913	30,863	119,848
1914	23,576	86,871
1915	12,870	50,557
1916	3,450	17,194
1917	6,403	22,568
1918	2,228	10,045
1919	2,744	10,577
1920	11,748	77,391
1921	59,135	343,909
1922	11,644	52,468
1923	59,192	276,719
1924	173,327	833,628
1925	296,153	1,415,104
1926	316,065	1,311,710
1927	309,212	1,332,289

Bay Leaves, Unground

	Pounds.	Dollars.
1924	55	28
1925	.....	.....
1926	2,181	72
1927	.....	.....

Bay Rum or Bay Water

	*Pounds.	Dollars.
1913	685	707
1914	483	620
1915	503	673
1916	335	341
1917	249	278
1918	641	796
1919	1,384	2,716
1920	14,532	13,666
1921	5,700	5,829
1922	12,336	49,718
1923	98,077	16,038
1924	193,960	26,659
1925	287,429	35,965
1926	452,909	50,996
1927	187,261	19,977

* Quantity stated in proof-gallons prior to 1924.

Beeswax, White, Bleached

	Pounds.	Dollars.
1926	361,362	155,947
1927	281,152	124,062

Beeswax and Other Animal Wax

	Pounds.	Dollars.
1871	16,309	3,902
1881	7,003	1,415
1891	383,725	81,920
1901	217,641	57,219
1913	828,287	254,704
1914	1,412,695	477,745
1915	1,565,338	440,047
1916	2,284,283	618,856
1917	2,711,514	904,557
1918	1,950,513	678,148
1919	2,100,458	783,716
1920	3,919,910	1,354,782
1921	2,215,332	693,551
1922	3,100,971	580,723
1923	4,072,168	817,746
1924	3,271,319	702,729
1925	2,956,990	875,743
1926	4,428,482	1,489,786
1927	4,475,642	1,591,316

Beet Pulp, Dried

	*Tons.	Dollars.
1920	26,531,967	537,965
1921	70,728,443	1,168,627
1922	10,878,161	79,934
1923	33,112,240	547,171
1924	27,422	791,678
1925	39,201	1,158,602
1926	38,023	1,214,542
1927	28,059	811,884

* Quantity stated in pounds prior to 1924.

Belladonna

	Pounds.	Dollars.
1924	143,130	19,400
1925	229,549	29,766
1926	244,117	28,746
1927	196,664	21,884

Benzaldehyde, Not Medicinal, Nitrobenzaldehyde

	Pounds.	Dollars.
1925	2,204	1,212
1926	1,141	745
1927	3,769	4,089

Benzanthrone, Benzidin Sulphate, Etc.

	Pounds.	Dollars.
1924	7	23
1925	.....	.....
1926	5,269	3,585
1927	313,197	191,764

Benzene

	Pounds.	Dollars.
1924	74,100	2,363
1925	585,427	17,534
1926	8,127,608	219,711
1927	3,240,132	69,914

Benzol

	Pounds.	Dollars.
1917	3,175,906	273,108
1918	3,073,948	216,640
1919	1,509,861	38,209
1920	170,519	2,547
1921	1,717,936	42,537
1922	458,949	9,351

Not stated after 1922.

Benzyl Chloride

	Pounds.	Dollars.
1920	1,150	452
1921	.....	.....
1922	.....	.....
1923	30	32
1924	.....	.....
1925	.....	.....

Not stated after 1925.

Betanaphthol, and Benzaldehyde, Medicinal

	Pounds.	Dollars.
1919	955	716
1920	32,996	23,002
1921	2	4
1922	1,056	465
1923	2,770	4,022
1924	801	1,202
1925	2,806	3,036
1926	1,736	2,672
1927	870	1,103

Betel or Areca Nuts

	Pounds.	Dollars.
1925	37,152	2,471
1926	102,141	7,081
1927	160,105	14,926

Bismuth

	Pounds.	Dollars.
1871	.....	47,047
1881	.....	83,209
1891	116,174	210,747
1901	156,782	251,284
1913	151,030	257,176
1914	133,190	241,448
1915	34,237	72,587
1916	64,281	155,928
1917	88,465	196,113
1918	75,611	207,098
1919	76,539	218,376
1920	75,781	97,489
1921	96,692	159,670
1922	97,470	158,760
1923	108,475	236,207
1924	33,398	75,404
1925	59,051	89,203
1926	72,741	185,350
1927	65,715	153,640

Bismuth, Salts and Compounds

	Pounds.	Dollars.
1924	10,652	14,518
1925	692	1,522
1926	14,188	17,275
1927	11,441	16,467

Imports Into the United States

Blanc Fixe or Precipitated Barium Sulphate

	Pounds.	Dollars.
1871	147,464	5,910
1881	11,330	2,027
1891	173,772	3,207
1901	2,328,525	28,481
1913	4,508,726	58,499
1914	4,752,474	60,941
1915	2,233,309	25,746
1916	492,723	11,523
1917	408,163	10,029
1918	179,200	2,376
1919	1,285	99
1920	41,108	1,267
1921	1,090,364	19,291
1922	3,651,152	55,643
1923	2,037,133	47,352
1924	1,184,694	29,665
1925	4,137,237	91,149
1926	2,928,192	61,120
1927	6,031,772	137,883

Blanco Polish

	Pounds.	Dollars.
1913	.....	21,854
1914	.....	17,997
1915	.....	17,743
1916	.....	21,228
1917	.....	53,458
1918	.....	24,821
1919	.....	18,953
1920	.....	36,387
1921	.....	17,999
1922	.....	17,785
1923	.....	15,850
1924	84,447	11,768
1925	79,263	12,339
1926	78,521	13,475
1927	10,832	1,821

Bleacher's Blue

		Dollars.
1913	.....	4,143
1914	.....	14,922
1915	.....	14,125
1916	.....	14,922
1917	.....	19,048
1918	.....	5,166
1919	.....	5,107
1920	.....	2,433
1921	.....	2,491
1922	.....	5,069

Not stated after 1922.

Blessed Thistle

	Pounds.	Dollars.
1924	42,696	1,854
1925	108,789	5,520
1926	63,158	3,062
1927	189,162	12,198

Bloodchar

	Pounds.	Dollars.
1913	2,954	333
1914	26,674	1,789
1915	14,167	1,196
1916	15	16
1917	.....	.....
1918	.....	.....
1919	10,732	443
1920	.....	.....
1921	101,787	1,735
1922	69	2

Included in "Bone Char," etc., after 1922.

Blood, Dried

	*Tons.	Dollars.
1871	.....	676
1881	.....	.....
1891	.....	1,594
1901	.....	138
1914	.....	391,947
1915	.....	227,648
1916	.....	196,600
1917	.....	379,067
1918	.....	479,518
1919	14,281,776	518,630
1920	18,457,336	678,948
1921	7,412,909	290,609
1922	15,085,485	337,349
1923	22,266,402	800,993
1924	9,300	583,122
1925	7,902	414,553
1926	11,862	658,204
1927	12,721	753,586

* Quantity stated in pounds prior to 1924.

Blues, Such as Berlin, Prussian, Chinese, Etc.

	Pounds.	Dollars
1871	19,185	7,133
1881	47,031	8,859
1891	181,451	48,074
1901	154,753	40,234
1914	275,174	50,149
1915	547,299	112,904
1916	185,294	110,901
1917	373,074	209,524
1918	13,867	15,009
1919	8,222	5,879
1920	297,256	120,726
1921	275,757	124,204
1922	20,617	7,113
1923	18,190	7,871
1924	23,156	5,786
1925	16,182	5,071
1926	8,998	2,892
1927	14,202	4,654

Bones, Crude, Steamed or Ground

	Pounds.	Dollars.
1871	.....	27,183
1881	.....	312,697
1891	.....	332,911
1901	.....	353,184
1913	.....	565,566
1914	.....	829,730
1915	.....	756,015
1916	.....	755,700
1917	.....	826,142
1918	.....	1,010,871
1919	26,275,886	369,583
1920	94,593,260	1,500,142
1921	155,409,170	2,526,323
1922	41,202,190	450,640
1923	96,895,736	1,149,822
1924	88,394,848	1,131,563
1925	119,579,636	1,282,848
1926	106,784,362	1,153,785
1927	112,530,337	1,298,792

Bone Black, Lamp Black, Etc.

	Pounds.	Dollars.
1891	.....	32,926
1901	.....	47,946
1913	.....	31,056
1914	.....	27,604
1915	.....	24,450
1916	.....	2,396
1917	.....	6,388
1918	.....	279
1919	69,977	5,118
1920	318,272	26,663
1921	439,126	28,757
1922	518,809	25,717
1923	1,787,243	119,068

Stated separately after 1923.

Bone Black, Dry or Ground in Oil

	Pounds.	Dollars.
1924	1,563,260	84,641
1925	146,641	10,080

Not stated after 1925.

Bone Char, Blood Char, Decolorizing, Etc., Not Suitable for Use as Pigment

	Pounds.	Dollars.
1901	.....	2,082
1913	.....	12,484
1914	.....	77,717
1915	.....	120,715
1916	.....	86,724
1917	.....	80,163
1918	.....	11,865
1919	.....	69,813
1920	.....	312,330
1921	.....	433,712
1922	.....	80,812
1923	.....	85,807
1924	186,291	18,396
1925	1,516,471	50,931
1926	2,204,646	65,791
1927	1,789,780	87,141

Bone Dust, Bone Phosphates, or Animal Carbon and Ash, Fit Only for Fertilizer

	Tons.	Dollars.
1881	.....	19,666
1891	6,614	122,717
1901	2,185	38,097
1913	33,919	818,307
1914	41,446	1,036,493
1915	23,440	584,748
1916	20,595	527,079
1917	14,805	383,542
1918	8,428	285,882
1919	3,970	92,588
1920	6,867	248,176
1921	27,413	1,417,886
1922	18,234	495,445
1923	41,904	1,215,547
1924	47,424	1,537,436
1925	16,594	460,092
1926	40,439	1,169,895
1927	50,071	1,475,250

Borate of Lime or Soda, and Other Borate Material, Crude

	Pounds.	Dollars.
1922	3,360,000	67,500
1923	10,317,008	226,584
1924	10,120,816	149,984
1925	5,284,243	86,367
1926	6,932,164	97,324

*Included in "Borax, Crude," after 1926.

Borax, Crude

	Pounds.	Dollars.
1871	5	1
1881	.....	.....
1891	82,642	9,050
1901	501,137	18,291
1913	11,768	882
1914	686	93
1915	.....	.....
1916	.....	.....
1917	83	3
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	6,854,490	107,788
1923	1,916,900	44,458
1924	2,240,100	22,724
1925	4,480,000	64,496
1926	2,240,023	32,145
1927	13,440,000	187,679

Borax, Refined

	Pounds.	Dollars.
1871	134,927	20,705
1881	4,136	866
1891	10,725	1,062
1901	.....	.....
1914	4,522	641
1915	2,265	314
1916	682	112
1917	614	109
1918	2	1
1919	478	166
1920	30,334	2,423
1921	226,469	12,505
1922	767	255
1923	62	15
1924	169,516	7,005
1925	1,323	248
1926	1,120	175
1927	20,014	1,627

Bort

	Carats.	Dollars.
1871	.....	17
1881	.....	51,409
1891	.....	142,818
1901	.....	782,926
1913	.....	94,043
1914	.....	86,717
1915	.....	71,548
1916	.....	54,974
1917	.....	156,983
1918	.....	297,939
1919	.....	676,005
1920	.....	3,591,776
1921	.....	1,037,852
1922	.....	1,047,894
1923	.....	313,633
1924	.....	93,813
1925	33,991	230,486
1926	90,772	707,111
1927	3,576	53,857

Bottle Caps, Collapsible Tubes and Sprinkler Tops, Not Decorated, Etc.

	Gross.	Dollars.
1913	.....	24,123
1914	.....	50,425
1915	.....	28,420
1916	.....	15,106
1917	.....	13,899
1918	.....	9,607
1919	.....	27
1920	.....	741
1921	.....	1,799
1922	.....	6,255
1923	.....	5,916
1924	.....	10,703
1925	.....	9,649
1926	.....	34,995
1927	120,275	41,764

Bottle Caps, Collapsible Tubes and Sprinkler Tops, Decorated, Etc.

	Gross.	Dollars.
1913	.....	203,357
1914	.....	547,034
1915	.....	214,522
1916	.....	178,081
1917	.....	190,864
1918	.....	55,532
1919	.....	11,118
1920	.....	73,551
1921	.....	46,733
1922	.....	94,154
1923	.....	60,566
1924	.....	70,579
1925	.....	110,064
1926	.....	25,750
1927	248,103	115,997

Brazil Wood

	Pounds.	Dollars.
1924	1,602,992	10,188
1925	1,301,898	16,123
1926	1,944,940	21,500
1927	31,000	166

Bristles

1871	581,429	721,518
1881	891,877	955,118
1891	1,522,115	1,502,827
1901	50,449	21,983

Stated separately for later years.

Bristles, Crude, Not Sorted, Bunched or Prepared

	Pounds.	Dollars.
1913	18,913	13,306
1914	27,036	25,280
1915	45,467	3,336
1916	92,300	15,239
1917	128,894	52,431
1918	33,483	44,145
1919	45,754	64,062
1920	100,737	148,938
1921	86,203	275,747
1922	5,816	11,032
1923	60,740	20,676
1924	6,188	17,124
1925	4,877	12,661
1926	67,998	24,789
1927	3,404	6,615

Pristles, Sorted, Bunched, or Prepared

	Pounds.	Dollars.
1913	3,479,666	3,319,904
1914	3,551,081	3,255,554
1915	3,726,625	3,348,533
1916	3,514,309	3,456,452
1917	4,456,284	4,678,801
1918	3,873,252	4,643,042
1919	3,358,111	4,599,516
1920	4,109,222	8,203,803
1921	4,008,241	8,534,333
1922	3,238,475	4,629,841
1923	5,407,504	7,670,472
1924	5,544,507	9,217,533
1925	3,858,985	7,766,451
1926	4,690,875	7,508,691
1927	5,468,746	7,462,721

Bromine

	Pounds.	Dollars.
1922	300	84
1923	1,462	670
1924	404	840
1925	41,820	9,714
1926	5,829	2,215
1927	35,517	13,625

Bromine Compounds N. E. S.

	Pounds.	Dollars.
1924	17,075	3,099
1925	148,508	55,176
1926	76,077	29,168
1927	551,466	170,560

Bronze, or Dutch Metal, in Leaf

	*Leaves (5½x5½ inches)	Dollars.
1871	.....	15,492
1881	.....	45,307
1891	.....	183,249
1901	983,371	87,864
1913	763,071	104,329
1914	792,578	110,316
1915	896,038	110,163
1916	291,390	38,559
1917	306,497	81,277
1918	473,835	136,394
1919	158,516	38,114
1920	246,944	71,535
1921	219,857	58,447
1922	158,028	32,586
1923	445,437	86,228
1924	501,614	87,137
1925	42,349,984	60,938
1926	45,879,591	90,894
1927	39,465,594	73,445

* Quantity stated in 100 leaves prior to 1925.

Bronze Powder, Brocades, Flitters and Metallics

	Pounds.	Dollars.
1891	130,367	19,555
1901	1,960,025	611,467
1913	1,405,502	420,308
1914	1,403,091	406,249
1915	1,063,206	288,654
1916	161,409	96,852
1917	524,032	283,976
1918	61,785	34,153
1919	11,099	5,093
1920	138,253	82,294
1921	745,041	288,435
1922	1,167,005	293,908
1923	965,056	287,363
1924	80,082	53,904

Stated separately after 1924.

Bronze Powder

	Pounds.	Dollars.
1925	744,372	275,235
1926	936,230	364,539
1927	1,008,408	371,489

Bronze Brocades, Flitters and Metallics

	Pounds.	Dollars.
1925	78,862	58,487
1926	84,724	48,266
1927	266,156	117,859

Brown, Spanish, Indian Red and Colcothar, or Oxide of Iron

	Pounds.	Dollars.
1871	.....	40,663
1881	.....	30,195
1891	.....	25,790
1901	.....	66,251
1913	.....	103,604
1914	.....	186,476
1915	.....	183,033
1916	.....	221,209
1917	.....	292,122
1918	.....	233,516
1919	9,791,019	280,076
1920	11,277,278	362,288
1921	16,656,187	523,306
1922	17,936,324	589,329
1923	20,278,852	724,244

Not stated after 1923.

Brown, Vandyke, Cassel Earth or Cassel Brown

	Pounds.	Dollars.
1881	.....	6,451
1891	.....	106
1901	.....	.....
1913	.....	1,381
1914	.....	2,663
1915	.....	1,497
1916	.....	365
1917	.....	2,534
1918	.....	854
1919	33,600	2,575
1920	373,456	21,181
1921	417,875	13,314
1922	327,400	7,514
1923	478,281	12,882
1924	418,605	7,877
1925	486,407	9,364
1926	988,962	17,424
1927	1,508,459	22,735

Brushes, Feather Dusters and Hair Pencils

		Dollars.
1871	.....	222,188
1881	.....	439,856
1891	.....	858,821
1901	.....	1,134,396
1913	.....	2,074,141
*1914	.....	563,160

*Figures cover period from July 1 to October 3, 1913.

Stated separately after October 3, 1913.

Brushes

		Dollars.
1914	.....	1,605,984
1915	.....	1,667,239
1916	.....	1,309,423
1917	.....	2,188,034
1918	.....	2,979,414

Stated separately after 1918.

Brushes, Hair Pencils

	*Dozen.	Dollars.
1919	401,262	5,349
1920	934,468	9,603
1921	2,072,143	33,349
1922	3,046,264	22,495
1923	2,308,314	24,684
1924	3,582,527	35,671
1925	3,267,644	46,273
1926	6,796,223	61,004
1927	1,327,970	123,856

*Quantity stated as "Number" prior to 1927.

Brushes, Paint

	*Dozen.	Dollars.
1924	4,509,511	86,238
1925	3,305,138	65,739
1926	3,785,980	63,385
1927	631,160	270,701

*Quantity stated as "Number" prior to 1927.

Brushes, Toilet, Comprising Tooth, Hair, Nail or Hand

	Number.	Dollars.
1919	43,835,308	2,208,099
1920	41,980,389	3,004,436
1921	34,442,124	3,102,492
1922	28,379,384	1,774,798
1923	43,822,871	2,806,445
1924	27,582,785	1,325,278
1925	16,534,799	815,395

Subdivided after 1925.

Brushes, N. E. S.

	*Dozen.	Dollars.
1919	7,899,454	205,327
1920	7,064,346	196,768
1921	12,747,257	586,565
1922	9,617,492	368,599
1923	17,916,236	765,302
1924	23,634,835	663,277
1925	18,564,750	623,279
1926	18,953,673	700,867
1927	990,516	563,695

*Quantity stated as "Number" prior to 1927.

Buchu Leaves

	Pounds.	Dollars.
1871	71,524	7,530
1881	93,850	14,012
1891	.....	1,314
1901	.....	22,238
1913	105,310	114,632
1914	125,368	130,352
1915	120,704	115,689
1916	94,520	85,452
1917	100,809	85,807
1918	50,685	42,434
1919	85,303	89,578
1920	86,535	138,843
1921	93,757	182,722
1922	67,506	44,974
1923	135,298	96,532
1924	128,192	81,019
1925	112,337	47,746
1926	83,180	28,446
1927	130,978	32,444

Buckthorn

	Pounds.	Dollars.
1924	313,955	13,981
1925	84,859	4,417
1926	303,534	13,391
1927	282,413	9,791

Burdock

	Pounds.	Dollars.
1924	44,277	4,768
1925	37,449	3,456
1926	50,424	2,912
1927	33,509	2,445

Butyraldehyde

	Pounds.	Dollars.
1926	10,586	2,632
1927	55,114	11,005

Cadmium

	Pounds.	Dollars.
1881	.....	1,131
1891	.....	678
1901	.....	5,715
1913	1,000	1,508
1914	1,543	1,239
1915	264	278
1916	5	6
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	101	216
1922	.....	.....
1923	2,256	2,553
1924	1,102	743
1925	5	6
1926	.....	.....
1927	.....	.....

Imports Into the United States

Caffeine

	Pounds.	Dollars.
.....	15,543	45,446
1913.....	59,773	211,361
1914.....	80,350	280,323
1915.....	54,323	186,557
1916.....	1,267	15,228
1917.....	1,601	17,219
1918.....	6,471	64,529
1919.....	2,662	26,383
1920.....	2,992	14,884
1921.....	2,574	12,769
1922.....	8,519	34,655
1923.....	5,890	11,361
1924.....	100	234
1925.....	752	1,680
1926.....	.....	.....
1927.....	1,500	2,713

Caffeine Salts and Derivatives, Except Coal Tar

	Pounds.	Dollars.
1914.....	.....	9,712
1915.....	.....	4,071
1916.....	.....	605
1917.....	.....	.....
1918.....	.....	.....
1919.....	.....	.....
1920.....	.....	.....
1921.....	.....	44
1922.....	.....	1,195
1923.....	.....	951
1924.....	150	209
1925.....	61	117
1926.....	300	710
1927.....	.....	.....

Calamus

	Pounds.	Dollars.
1924.....	17,658	980
1925.....	14,292	1,209
1926.....	13,939	608
1927.....	25,829	1,421

Calcium

	Pounds.	Dollars.
1920.....	21,648	3,937
1921.....	2,269	2,692
1922.....	3,684	682
1923.....	41	141
1924.....	4,301	2,132
1925.....	1,325	724
1926.....	.....	.....
1927.....	.....	.....

Calcium Acetate, Chloride, Carbide and Nitrate

	Pounds.	Dollars.
1871.....	.....	89,660
1881.....	.....	.....
1891.....	.....	.....
1901.....	.....	.....
1914.....	.....	53,455
1915.....	.....	1,208,394
1916.....	.....	3,206,369
1917.....	.....	3,808,281
1918.....	.....	3,422,190
1919.....	74,915,529	2,920,293
1920.....	76,847,476	2,911,179
1921.....	111,261,888	4,466,039
1922.....	47,667,755	1,775,973
1923.....	41,360,410	1,481,787

Stated separately after 1923.

Calcium Acetate, Crude (Brown and Gray)

	Pounds.	Dollars.
1924.....	1,285,427	37,572
1925.....	4,889,747	120,794
1926.....	3,217,053	78,854
1927.....	6,415,268	206,513

Calcium Arsenate

	Pounds.	Dollars.
1925.....	84	30
1926.....	2,037	385
1927.....	3,817	721

Calcium Carbide

	Pounds.	Dollars.
1924.....	10,271,143	352,377
1925.....	16,630,147	628,672
1926.....	17,553,503	632,072
1927.....	16,289,425	645,012

Calcium Chloride

	Pounds.	Dollars.
1924.....	8,018,017	54,219
1925.....	5,970,844	47,258
1926.....	9,555,280	68,884
1927.....	15,088,415	97,510

Calcium Cyanamid or Lime Nitrogen

	Tons.	Dollars.
1913.....	14,656	777,774
1914.....	29,536	1,590,004
1915.....	20,564	919,574
1916.....	38,023	1,633,366
1917.....	44,146	1,951,104
1918.....	43,070	2,297,475
1919.....	46,149	2,705,475
1920.....	84,678	5,534,716
1921.....	34,702	2,443,450
1922.....	21,643	1,111,375
1923.....	57,678	3,086,271
1924.....	67,715	3,611,887
1925.....	90,761	4,252,918
1926.....	102,052	5,055,086
1927.....	92,153	3,977,599

Calcium Nitrate (Nitrate of Lime)

	Tons.	Dollars.
1924.....	9,496	379,580
1925.....	7,555	346,285
1926.....	11,655	500,286
1927.....	16,999	774,912

Calcium Tartrate, Crude

	Pounds.	Dollars.
1914.....	113,256	8,849
1915.....	1,755,954	161,566
1916.....	1,101,255	135,638
1917.....	371,910	51,418
1918.....	118,358	19,715
1919.....	.....	.....
1920.....	212,519	27,236
1921.....	54,851	809
1922.....	218,000	12,080
1923.....	1,081,827	80,065
1924.....	356,983	1,454
1925.....	622,106	40,792
1926.....	541,035	36,236
1927.....	199,645	15,544

Calomel, Corrosive Sublimate and Other Mercurial Medicinal Preparations

		Dollars
1871.....	.....	3,147
1881.....	.....	5,640
1891.....	.....	5,244
1901.....	.....	15,931
1913.....	.....	42,728
1914.....	.....	37,589
1915.....	.....	25,694
1916.....	.....	13,158
1917.....	.....	9,974
1918.....	.....	2,124
1919.....	.....	915

Stated separately after 1919.

Calomel

	Pounds.	Dollars.
1920.....	3,026	3,254
1921.....	720	1,029
1922.....	2,581	1,376
1923.....	2,847	3,259
1924.....	3,386	3,018
1925.....	4,796	4,093
1926.....	7,659	7,727
1927.....	5,526	6,458

Capsicum, or Red Pepper, Ground or Unground

	Pounds.	Dollars.
1913.....	4,022,755	412,823
*1914.....	984,716	130,076

*Figures are for July 1 to October 3, 1913. Stated separately after October 3, 1913. See under Pepper.

Camomile Flowers

	Pounds.	Dollars
1881.....	.....	11,761
1891.....	.....	9,463
1901.....	.....	34,035
1913.....	.....	14,176
1914.....	.....	6,252
1915.....	.....	13,113
1916.....	.....	27,810
1917.....	.....	64,432
1918.....	.....	41,886
1919.....	72,404	14,394
1920.....	336,397	91,515
1921.....	167,700	36,893
1922.....	38,124	7,653
1923.....	333,828	67,240
1924.....	242,872	24,104
1925.....	56,582	5,458
1926.....	124,125	11,566
1927.....	190,261	29,891

Camwood

	Tons.	Dollars.
1881.....	308	27,513
1891.....	3	220
1901.....	.....	.....
1913.....	½	191
1914.....	.....	.....
1915.....	1	209
1916.....	80	5,991
1917.....	.....	.....
1918.....	.....	.....
1919.....	.....	.....
1920.....	.....	.....
1921.....	.....	.....
1922.....	1	131
1923.....	.....	.....
1924.....	.....	.....
1925.....	.....	.....
1926.....	.....	.....
1927.....	.....	.....

Candle Pitch or Tar, and Palm or Other Vegetable Stearin

	Pounds.	Dollars
1891.....	.....	13,411
1901.....	.....	4,837
1913.....	3,047,020	56,970
1914.....	2,203,222	40,004
1915.....	1,262,725	23,400
1916.....	853,140	21,596
1917.....	467,958	14,446
1918.....	103,349	7,063
1919.....	.....	.....
1920.....	160,050	40,795
1921.....	5,000	767
1922.....	40,826	2,025
1923.....	250,290	5,670

Included in "Oil, Stearin, Palm, etc.," after 1923.

Candles and Tapers, Wax and Other

	Pounds.	Dollars.
1871.....	16,018	5,894
1881.....	10,999	3,237
1891.....	19,842	3,968
1901.....	26,272	5,651
1913.....	.....	22,990
1914.....	.....	14,348
1915.....	.....	8,638
1916.....	.....	9,118
1917.....	.....	4,515
1918.....	.....	3,916
1919.....	28,348	6,708
1920.....	28,459	8,365
1921.....	34,991	9,369
1922.....	76,715	13,726
1923.....	74,096	14,816
1924.....	262,129	66,963
1925.....	552,682	169,593

Subdivided after 1925.

Candles, Wax

	Pounds.	Dollars.
1926.....	413,961	149,446
1927.....	436,126	191,313

Candles, All Others

	Pounds.	Dollars.
1926.....	24,375	8,073
1927.....	34,839	9,142

Cannabis

	Pounds.	Dollars.
1924.....	200	443
1925.....	202	1,292
1926.....	299	1,604
1927.....	200	1,020

Cantharis and Other Blistering Beetles

	Pounds.	Dollars.
1871.....	20,803	20,539
1881.....	16,008	11,087
1891.....	5,787	4,256
1901.....	22,800	9,435
1914.....	5,648	4,435
1915.....	14,047	12,266
1916.....	32,603	26,923
1917.....	25,625	47,857
1918.....	5,949	6,677
1919.....	5,289	10,270
1920.....	10,159	12,269
1921.....	4,573	5,196
1922.....	2,953	3,026
1923.....	17,400	11,678
1924.....	667	1,056
1925.....	3,680	2,500
1926.....	422	885
1927.....	.....	.....

Carbazole, Purity of 65% or More

	Pounds.	Dollars.
1920.....	259	108
1921.....	.....	.....
1922.....	8,820	3,865
1923.....	.....	.....
1924.....	.....	.....
1925.....	2,073	828
1926.....	2,157	324
1927.....	.....	.....

Carbon Tetrachloride

	Pounds.	Dollars.
1914.....	572,910	28,300
1915.....	342,854	18,139
1916.....	.....	.....
1917.....	2	2
1918.....	.....	.....
1919.....	.....	.....
1920.....	.....	.....
1921.....	.....	.....
1922.....	144,472	3,956
1923.....	22,039	603
1924.....	1,429	130
1925.....	.....	.....
1926.....	107	43
1927.....	.....	.....

Cassava

	Pounds.	Dollars.
1925.....	169,807	3,089
1926.....	65,979	1,885
1927.....	48,759	1,919

Casein or Lactarene

	Pounds.	Dollars.
1913.....	8,803,639	651,062
1914.....	10,799,351	705,305
1915.....	7,919,742	498,897
1916.....	10,376,641	984,899
1917.....	12,319,111	1,843,492
1918.....	12,106,855	1,765,653
1919.....	8,125,135	959,995
1920.....	24,039,313	2,783,548
1921.....	14,179,764	1,570,089
1922.....	10,529,295	706,861
1923.....	25,641,741	4,556,246
1924.....	16,404,299	1,840,057
1925.....	18,897,139	1,442,204
1926.....	24,258,397	2,384,058
1927.....	26,530,425	3,274,394

Casein Compounds, Galalith, Etc.

	Pounds.	Dollars.
1913.....	.....	12,736
1914.....	.....	15,060
1915.....	.....	10,048
1916.....	.....	10,028
1917.....	.....	30,762
1918.....	.....	45,368
1919.....	.....	75,883
1920.....	.....	138,515
1921.....	.....	58,016
1922.....	.....	147,448
1923.....	.....	261,960
1924.....	333,465	360,589
1925.....	204,347	231,084
1926.....	137,817	189,460
1927.....	119,183	224,824

Casein Glue, Isinglass and Other Fish Sounds, Prepared

	Pounds.	Dollars.
1924.....	18,743	23,187
1925.....	37,268	30,463
1926.....	20,680	27,394
1927.....	37,899	33,084

Cassia Buds, Unground.

	Pounds.	Dollars.
1871.....	22,003	6,554
1881.....	64,199	9,897
1891.....	129,317	13,914
1901.....	6,545	1,366
1914.....	173,449	10,101
1915.....	193,332	10,394
1916.....	197,056	16,585
1917.....	218,563	14,131
1918.....	173,202	16,271
1919.....	284,140	52,853
1920.....	211,688	23,399
1921.....	152,185	17,429
1922.....	793,701	45,094
1925.....	549,649	33,072
1926.....	839,745	60,167
1927.....	308,191	27,866

Not stated during 1923 and 1924.

Cassia, Cassia Buds and Cassia Vera, Ground

	Pounds.	Dollars.
1871.....	2,460	387
1881.....	.....	.....
1891.....	.....	.....
1901.....	.....	.....
1917.....	139,224	21,672
1918.....	5,400	844
1919.....	200	20
1920.....	.....	.....
1921.....	24,800	7,753
1922.....	.....	.....
1923.....	24,912	1,125
1924.....	9	3
1925.....	10	3
1926.....	22,677	2,294
1927.....	11,199	1,456

Cassia, and Cassia Vera, Unground

	Pounds.	Dollars.
1871.....	1,632,646	291,972
1881.....	1,987,052	207,106
1891.....	3,611,621	137,591
1901.....	3,364,336	297,478
1914.....	5,216,426	358,218
1915.....	5,658,154	348,598
1916.....	7,487,156	493,161
1917.....	9,019,350	803,079
1918.....	5,817,554	429,341
1919.....	6,581,061	546,194
1920.....	8,102,110	858,667
1921.....	5,850,438	622,260
1922.....	9,981,916	587,018
1923.....	9,671,137	716,539
1924.....	3,549 805	211,277
1925.....	5,929,669	382,594
1926.....	10,057,868	686,961
1927.....	7,786,664	992,779

Castoreum

	Ounces.	Dollars.
1871.....	.....	5
1881.....	.....	62
1891.....	5,247	1,343
1901.....	527	232
1914.....	6,338	3,468
1915.....	13,035	5,344
1916.....	19,657	6,694
1917.....	24,427	8,250
1918.....	28,578	7,961
1919.....	21,067	6,941
1920.....	31,534	10,378
1921.....	8,288	2,385
1922.....	22,985	4,657
1923.....	3,807	545
1924.....	8,634	1,544
1925.....	1,958	527
1926.....	1,724	1,128
1927.....	4,716	1,880

Castor Beans

	*Pounds.	Dollars.
1871.....	36,853	44,353
1881.....	36,540	34,770
1891.....	105,374	120,202
1901.....	191,288	255,594
1914.....	1,043,928	1,154,085
1915.....	924,605	993,580
1916.....	1,071,969	1,556,465
1917.....	767,075	1,185,775
1918.....	1,262,488	2,842,206
1919.....	627,835	2,188,256
1920.....	1,404,550	3,633,693
1921.....	663,031	1,343,521
1922.....	1,554,016	2,046,377
1923.....	1,504,941	2,876,226
1924.....	81,543,416	3,221,267
1925.....	90,747,113	4,320,744
1926.....	106,763,274	4,169,573
1927.....	119,111,564	4,104,269

*Figures stated in bushels prior to 1924.

Catgut, Whipgut or Wormgut, Unmanufactured

	Pounds.	Dollars.
1891.....	.....	240,450
1901.....	.....	1,834
1914.....	.....	123,551
1915.....	.....	198,081
1916.....	.....	253,678
1917.....	.....	316,491
1918.....	.....	216,810
1919.....	24,813	328,796
1920.....	23,197	172,662
1921.....	47,440	324,958
1922.....	46,988	274,199
1923.....	56,856	297,720

Stated separately after 1923.

Catgut For Surgical Use

	Pounds.	Dollars.
1924.....	35,400	155,444
1925.....	21,180	84,894
1926.....	7,108	31,478
1927.....	831	6,677

Catgut, Whipgut and Wormgut, Manufactures of

	Pounds.	Dollars.
1881.....	.....	194,132
1891.....	.....	13,451
1901.....	.....	77,532
1914.....	.....	62,466
1915.....	.....	68,492
1916.....	.....	9,790
1917.....	.....	4,867
1918.....	.....	8,602
1919.....	.....	14,446
1920.....	.....	8,001
1921.....	.....	21,170
1921.....	.....	6,850
1923.....	.....	42,394
1924.....	6,302	64,412
1925.....	3,971	33,147
1926.....	28,091	129,891
1927.....	32,488	152,517

Cellophane in Sheets

	Pounds.	Dollars.
1918.....	.....	5,046
1919.....	.....	10,761
1920.....	.....	6,585
1921.....	.....	31,847
1922.....	.....	12,967
1923.....	.....	145,711
1924.....	6,276	5,607
1925.....	51,477	55,902
1926.....	98,465	117,794
1927.....	119,164	105,713

Cement, Keene's, or Other Gypsum Cement

	Tons.	Dollars.
1914.....	1,225	19,290
1915.....	586	11,310
1916.....	520	8,766
1917.....	468	8,530
1918.....	305	6,362
1919.....	89	3,024
1920.....	197	5,976
1921.....	216	8,736
1922.....	186	5,788
1923.....	380	10,763
1924.....	353	10,370
1925.....	507	12,281
1926.....	517	15,459
1927.....	526	15,139

Cement, Portland, White, Non-staining

	*Pounds.	Dollars.
1920.....	639	24,652
1921.....	1	31
1922.....	.....	.....
1923.....	17,943	207,812
1924.....	7,175,611	40,297
1925.....	6,060,125	29,311
1926.....	5,001,282	25,898
1927.....	6,376,242	54,100

* Quantity stated in tons prior to 1924.

Cement, Roman, Portland and Other Hydraulic

	*Tons.	Dollars.
1871.....	.....	52,103
1881.....	.....	441,512
1891.....	10,905,989	3,970,565
1901.....	6,282,158	2,164,556
1913.....	313,092	124,395
1914.....	374,471	163,460
1915.....	342,292	132,864
1916.....	19,980	9,182
1917.....	4,196	2,929
1918.....	8,426	6,020
1919.....	32,135	51,063
1920.....	815,812	441,522
1921.....	1,317,177	965,591
1922.....	480,809	330,671
1923.....	2,437,715	1,243,561
1924.....	373,677	3,690,754
1925.....	375,237	3,532,937
1926.....	741,793	6,877,088
1927.....	401,386	3,587,412

* Quantity stated in 100 pounds prior to 1924.

Cement, Not Elsewhere Specified

	Pounds.	Dollars.
1926.....	1,052,832	21,259
1927.....	980,512	16,916

Cerium Fluoride

	Pounds.	Dollars.
1924.....	11,600	921
1925.....	36,650	1,173
1926.....	.....	.....
1927.....	39,683	2,469

Cerium Nitrate

	Pounds.	Dollars.
1924.....	969	811
1925.....	4,636	4,892
1926.....	2,786	3,194
1927.....	42	71

Imports Into the United States

Cerium Salts, N. E. S.

	Pounds.	Dollars.
1924	3,951	1,087
1925	82,335	3,693
1926	16,970	1,493
1927	22,150	1,710

Chalk Unmanufactured

	Tons.	Dollars.
1871	18,248	42,750
1881	51,546	52,784
1891	73,772	51,845
1901	.....	.....
1913	150,010	120,049
1914	128,947	102,907
1915	120,225	91,188
1916	131,368	95,861
1917	143,216	131,385
1918	107,391	120,792
1919	84,539	117,796
1920	112,292	179,543
1921	123,672	233,408
1922	78,084	123,123
1923	140,520	189,626
1924	104,850	144,014
1925	102,202	122,779
1926	104,647	126,124
1927	104,161	135,896

Chalk, When Ground, Precipitated, or Otherwise Prepared, Including Tailor's, Billiard, Red or French

		Dollars.
1871	.....	4,662
1881	.....	3,851
1891	.....	18,643
1901	.....	.....
1913	.....	79,731
1914	.....	52,656
1915	.....	36,621
1916	.....	46,135
1917	.....	39,319
1918	.....	42,390
1919	.....	28,265

Stated as following classes after 1919:—

Chalk, Precipitated

	Pounds.	Dollars
1881	.....	.....
1891	.....	4,262
1901	.....	.....
1920	932,578	23,863
1921	2,390,250	58,184
1922	2,801,299	70,090
1923	6,838,100	123,678
1924	13,160,284	119,015
1925	15,245,818	136,835
1926	19,991,865	145,429
1927	14,605,354	118,456

Chalk, Precipitated, for Medicinal or Toilet Purposes

	Pounds.	Dollars
1881	.....	.....
1891	433,736	18,643
1901	.....	.....
1920	1,021,885	27,899
1921	328,073	9,952
1922	95,170	1,779

Not stated after 1922.

Chamois Skins

	Dozen.	Dollars.
1913	.....	149,057
1914	.....	107,324
1915	.....	64,267
1916	.....	108,346
1917	.....	176,578
1918	.....	86,923
1919	.....	7,950
1920	.....	61,689
1921	.....	74,454
1922	.....	82,150
1923	.....	138,858
1924	.....	245,933
1925	.....	227,564
1926	.....	270,324
1927	61,325	473,126

Charcoal, Wood

	Pounds.	Dollars
1913	.....	25,557
1914	.....	60,286
1915	.....	39,978
1916	.....	45,174
1917	.....	73,583
1918	.....	10,915
1919	1,355,812	42,548
1920	4,722,508	83,329
1921	6,107,968	90,411
1922	1,244,176	14,030
1923	1,706,705	15,454
1924	6,926,320	48,928
1925	6,905,487	48,687
1926	9,604,464	54,268
1927	9,136,629	50,769

Chestnut Extract for Tanning

	Pounds.	Dollars.
1922	2,420	116
1923	.....	.....
1924	1,400	131
1925	2,926	87
1926	200	18
1927	.....	.....

Chicory Root, Raw but Unground

	Pounds.	Dollars.
1913	2,208,057	32,939
1914	1,880,925	22,028
1915	471,966	6,717
1916	.....	.....
1917	241,299	29,131
1918	4,577	501
1919	.....	.....
1920	1,526,306	82,989
1921	6,052,078	391,923
1922	292	70
1923	468,733	10,390

Included in "Acorns, Chicory and Dandelion Root" after 1923.

China Clay, or Kaolin, Crude

	Tons.	Dollars.
1881	6,887	66,554
1891	33,706	232,699
1901	105,198	701,790
1913	263,838	1,753,822
1914	241,936	1,590,054
1915	230,484	1,506,555
1916	228,936	1,376,990
1917	206,729	1,212,099
1918	192,705	1,303,668
1919	146,260	1,436,786
1920	213,713	2,481,396
1921	247,267	2,805,865
1922	192,661	2,037,912
1923	255,132	2,762,642
1924	255,502	2,650,330
1925	321,667	3,160,686
1926	308,178	3,039,567
1927	326,737	3,169,344

Chloral Hydrate

	Pounds.	Dollars.
1901	4,485	2,993
1913	.....	.....
1914	644	241
1915	112	25
1916	1	2
1917	.....	.....
1918	1,057	1,599
1919	.....	.....
1920	.....	.....
1921	1,850	1,711
1922	55	57
1923	7,489	3,005
1924	.....	.....
1925	3,096	3,150
1926	2	2
1927	.....	.....

Chloroform

	Pounds.	Dollars.
1871	62	107
1881	50	33
1891	.....	.....
1901	259	79
1913	942	1,643
1914	2,444	990
1915	26	43
1916	.....	.....
1917	.....	.....
1918	1	1
1919	54	40
1920	2	4
1921	.....	.....
1922	4,512	615
1923	896	384
1924	.....	.....
1925	88	101
1926	18	19
1927	11	30

Chlorophyll Extract

	Pounds.	Dollars.
1912	4,461	3,586
1913	7,508	8,544
1914	10,125	8,503
1915	3,490	3,671
1916	190	192
1917	.....	.....
1918	199	163
1919	363	511
1920	8	14
1921	1,248	2,242
1922	2,751	3,517
1923	1,881	1,716
1924	3,870	5,393
1925	2,259	4,322
1926	2,569	6,900
1927	12,620	11,980

Chrome or Chromium Metal

	*Pounds.	Dollars.
1913	522	89,291
1914	208	25,976
1915	81	6,943
1916	10	1,998
1917	10	1,851
1918	.....	.....
1919	.....	.....
1920	2,553,255	279,894
1921	2,945,624	315,504
1922	985,243	115,723
1923	3,032,761	271,770
1924	157,351	28,823
1925	9,475	4,005
1926	2,240	1,529
1927	.....	.....

* Quantity stated in tons prior to 1920.

Chrome Ore or Chromite

	Tons.	Dollars.
1891	4,008	56,982
1901	12,890	214,762
1913	49,772	503,664
1914	85,892	777,166
1915	159,421	772,220
1916	107,069	1,196,250
1917	113,386	1,648,728
1918	77,863	1,555,861
1919	71,592	2,489,830
1920	103,625	1,418,570
1921	152,784	1,689,202
1922	54,820	413,206
1923	134,757	1,136,125
1924	113,785	980,182
1925	132,701	1,207,517
1926	160,742	1,302,075
1927	257,604	1,996,319

Chrome Yellow, Green and All Other Chromium Colors

	Pounds.	Dollars.
1891	76,601	11,194
1901	133,029	19,994
1913	148,299	23,405
1914	134,460	22,412
1915	124,638	21,171
1916	27,929	5,586
1917	28,078	4,202
1918	1,310	459
1919	5,127	2,074
1920	34,799	19,164
1921	322,050	23,894
1922	14,835	3,954
1923	83,837	15,320
1924	67,693	15,338
1925	102,408	24,936
1926	177,696	42,157
1927	235,094	49,853

Chromium Chloride

	Pounds.	Dollars.
1924	6,571	968
1925	.....	.....
1926	25,325	1,651
1927	.....	.....

Chromium Sulphate

	Pounds.	Dollars.
1924	2,324	372
1925	.....	.....
1926	220	158
1927	40,960	3,112

Chrysarobin and Its Salts

	Pounds.	Dollars.
1924	224	540
1925	312	1,014

Not stated after 1925.

Cinchona Bark, Alkaloids or Salts of, Not Elsewhere Stated

	Ounces.	Dollars.
1891	112,013	29,977
1901	817,315	289,630
1913	648,865	131,692
1914	452,292	117,915
1915	208,330	66,004
1916	231,100	82,167
1917	628,947	324,438
1918	3,131,958	769,403
1919	1,147,102	272,631
1920	1,112,598	268,509
1921	1,666,688	504,489
1922	766,582	276,833
1923	3,405,084	1,106,520
1924	125,141	57,347
1925	361,153	177,866
1926	386,906	98,914
1927	381,356	105,490

Cinchonidia

	Ounces.	Dollars.
1891	156,229	3,856
1901	28,000	9,465
1913	309,395	43,980
1914	205,006	19,302
1915	69,497	8,223
1916	131,481	15,814
1917	221,272	17,590
1918	86,482	20,708
1919	86,000	25,295
1920	40,188	11,065
1921	89,844	35,558
1922	92,688	55,486

Not stated after 1922.

Cinchonidine and Its Salts

	Ounces.	Dollars.
1924	355,902	140,963
1925	310,640	118,596
1926	437,512	164,047
1927	381,400	128,830

Cinchonine and Its Salts

	Ounces.	Dollars.
1924	96,940	42,358
1925	52,500	18,881
1926	60,596	16,469
1927	93,400	26,644

Cinnamon, and Chips of, Unground

	Pounds.	Dollars.
1871	21,932	12,147
1881	10,397	3,853
1891	38,671	4,537
1901	483,992	77,685
1913	1,405,832	188,267
1914	303,967	44,304
1915	528,254	74,081
1916	410,594	50,026
1917	564,248	77,272
1918	686,466	111,004
1919	537,119	99,881
1920	607,183	143,254
1921	524,111	138,660
1922	415,863	66,867
1923	455,737	72,170
1924	490,358	65,815
1925	317,985	76,345
1926	285,256	87,166
1927	297,715	111,278

Civet

	Ounces.	Dollars.
1891	3,952	6,294
1901	4,397	9,473
1913	11,269	15,557
1914	2,761	3,978
1915	1,820	2,086
1916	9,600	12,099
1917	9,230	13,148
1918	9,766	11,877
1919	15,315	17,253
1920	10,554	12,048
1921	8,662	16,877
1922	13,545	18,684
1923	17,599	31,313
1924	13,694	28,545
1925	15,000	34,646
1926	9,814	20,647
1927	11,211	22,553

Clay, Common Blue and Gross Amerode Glass-Pot Clay, Unwrought

	Tons.	Dollars.
1891	2,965	38,621
1901	5,423	67,763
1913	23,213	211,005
1914	20,587	180,524
1915	12,274	107,146
1916	3,488	16,088
1917	412	2,353
1918	64	869
1919	80	493
1920	2,456	62,507
1921	4,564	98,029
1922	708	15,376
1923	9,182	101,230
1924	10,600	101,653
1925	6,661	66,632
1926	6,543	68,603
1927	5,479	52,774

Clay, Plasticine and Other Modeling

	Pounds.	Dollars.
1913	.....	8,519
1914	.....	9,424
1915	.....	6,541
1916	.....	7,978
1917	.....	12,468
1918	.....	7,083
1919	37,875	6,025
1920	84,092	12,162
1921	139,475	22,150
1922	99,569	13,958
1923	52,835	8,313
1924	13,500	1,961
1925	49,003	6,372
1926	30,770	4,283
1927	55,310	9,071

Clays, or Earths, Crude, Not Specially Provided For

	Tons.	Dollars.
1871	12,160	103,144
1881	12,444	123,545
1891	19,582	154,518
1901	25,146	144,050
1913	37,370	167,614
1914	37,572	210,574
1915	36,072	153,041
1916	34,677	148,916
1917	30,942	138,171
1918	24,474	144,668
1919	23,199	199,332
1920	23,324	200,868
1921	41,259	396,303
1922	30,024	273,257
1923	48,967	398,541
1924	59,511	557,239
1925	65,915	654,365
1926	67,969	614,255
1927	51,699	533,780

Clover Flowers

	Pounds.	Dollars.
1924	75,512	38,542
1925	.....	.....
1926	19,176	2,142
1927	24,948	1,828

Cloves, Unground

	Pounds.	Dollars
1871	1,137,896	64,547
1881	1,046,911	310,543
1891	2,510,066	284,181
1901	2,120,386	170,068
1913	2,734,992	481,751
1914	5,054,621	597,310
1915	5,346,665	595,546
1916	7,066,237	791,708
1917	3,867,851	532,345
1918	5,521,919	1,166,879
1920	6,730,252	2,101,971
1919	3,841,197	1,072,137
1921	4,124,625	1,146,930
1922	6,013,990	1,267,248
1923	6,952,152	1,174,679
1924	5,618,913	1,351,016
1925	5,564,074	1,167,988
1926	5,751,901	1,209,354
1927	6,468,390	1,152,794

Clove Stems, Unground

	Pounds.	Dollars.
1871	52,446	1,452
1881	118,968	8,435
1891	425,137	8,660
1901	295,696	8,271
1913	32,830	1,333
1914	268	20
1915	4,391	760
1916	57,160	4,009
1917	1,120	174
1918	46,432	6,990
1919	.....	.....
1920	2,905,811	356,363
1921	914,115	61,796
1922	169,515	9,000
1923	49,936	9,999
1924	27,303	4,823
1925	.....	.....
1926	5,844	1,423
1927	1,000	361

Cobalt Linoleate

	Pounds.	Dollars.
1925	807	294
1926	4,989	1,854
1927	24	22

Cobalt Metal

	Pounds	Dollars
1919	156,372	511,683
1920	99,595	228,891
1921	133,857	322,293
1922	4,252	11,143
1923	264,933	535,295
1924	156,147	366,588
1925	133,257	286,123
1926	250,257	536,274
1927	477,617	1,072,879

Cobalt and Cobalt Ore, and Zaffer

	Pounds.	Dollars
1881	.....	.....
1891	2,024	54
1901	.....	.....
1913	310,951	80,718
1914	197,009	115,038
1915	24,095	8,225
1916	144,170	186,124
1917	136,883	191,966
1918	161,695	306,310

Stated separately after 1918.

Cobalt Ore

	Pounds.	Dollars.
1919	220,125	55,197
1920	17,035	2,823
1921	13,039	4,794
1922	7,657	3,235
1923	48,447	55,918
1924	35,701	40,042
1925	36,685	21,145
1926	30,672	74,349
1927	194,969	9,738

Cobalt Oxide

	Pounds.	Dollars.
1871	.....	2,766
1881	21,844	15,837
1891	34,700	63,433
1901	61,962	111,740
1913	28,729	14,405
1914	109,584	95,026
1915	109,155	180,087
1916	238,934	228,745
1917	236,822	220,263
1918	220,793	248,172
1919	143,003	215,441
1920	199,097	282,457
1921	187,177	442,501
1922	160,617	316,393
1923	288,249	579,081
1924	232,020	446,217
1925	244,048	470,782
1926	322,762	614,669
1927	145,326	558,435

Cobalt Sulphate

	Pounds.	Dollars.
1924	28,659	17,331
1925	.....	.....
1926	28,880	17,228
1927	34,071	17,639

Cobalt, Salts and Compounds, N. E. S.

	Pounds.	Dollars.
1924	706	697
1925	160	261
1926	412	960
1927	188	289

Coca Leaves

	Pounds.	Dollars
1901	.....	482
1913	1,175,780	139,035
1914	711,564	91,384
1915	1,048,312	98,670
1916	947,537	100,627
1917	634,932	90,131
1918	1,059,484	179,312
1919	1,023,322	186,477
1920	903,552	211,514
1921	306,308	63,767
1922	33,058	5,170
1923	302,352	91,960
1924	221,519	44,574
1925	99,196	16,222
1926	261,114	72,933
1927	263,691	68,786

Cocaine, Ecgonine, and Salts of Cocaine

	Pounds.	Dollars.
1901	.....	176,948
1913	3,715	4,835
1914	3,291	4,101
1915	179	422
1916	4,275	5,887
1917	19,388	38,627
1918	8,597	35,358
1919	19,382	68,584
1920	11,614	29,217
1921	6,172	22,521
1922	7,376	16,064

No imports allowed after 1922.

Cocoa Butter

	Pounds.	Dollars
1913	3,634,986	990,568
1914	2,876,967	801,259
1915	126,028	35,883
1916	69,888	15,824
1917	24,289	7,581
1918	14,512	4,569
1919	30,716	3,310
1920	9,439	3,486
1921	441,633	96,172
1922	6,335,006	1,550,062
1923	2,338,242	590,909
1924	1,022,320	179,049
1925	728,483	123,420
1926	17,997	6,680
1927	247,867	71,135

Colchicum Seeds and Root

	Pounds.	Dollars.
1924	17,237	672
1925	13,589	1,218
1926	3,493	404
1927	12,199	1,295

Imports Into the United States

Collodion and All Other Liquid Solutions of Pyroxylin

	Pounds.	Dollars.
1922	12,051	4,685
1923	73,107	50,976
1924	122,279	108,278
1925	103,952	92,024
1926	92,136	73,798
1927	288,451	254,111

Cocculus Indicus

	Pounds.	Dollars.
1881	1,081	22
1891	1,741	42
1901	9,192	166
1913	.....	.....
1914	4,446	121
1915	9,550	388
1916	.....	.....
1917	7,410	2,818
1918	.....	.....
1919	26,116	10,122
1920	4,325	612
1921	23,632	1,560
1922	.....	.....
1923	460	92
1924	44,920	1,557
1925	7,822	341
1926	5,636	350
1927	.....	.....

Cochineal

	Pounds.	Dollars.
1871	1,869,084	1,184,245
1881	1,072,144	527,836
1891	86,797	19,935
1901	114,414	20,414
1913	109,089	44,249
1914	138,139	52,260
1915	155,430	38,454
1916	772,416	358,914
1917	124,745	46,802
1918	160,547	75,924
1919	177,585	70,229
1920	166,014	72,718
1921	100,844	39,657
1922	191,102	67,011
1923	223,702	87,047
1924	118,856	38,438
1925	115,084	36,721
1926	206,091	67,507
1927	117,843	58,616

Colocynth

	Pounds.	Dollars
1924	28,307	4,388
1925	54,391	8,494
1926	10,474	1,839
1927	40,908	9,917

Colombo Root

	Pounds.	Dollars.
1881	8,336	814
1891	.....	.....
1901	43,040	1,466
1913	27,585	794
1914	4,587	134
1915	8,751	458
1916	48,867	3,442
1917	92,349	4,999
1918	20,759	3,061
1919	2,195	546
1920	130,862	16,185
1921	425,190	32,646
1922	.....	.....
1923	2,440	22
1924	53,983	688
1925	.....	.....
1926	34,018	931
1927	26,801	979

Colors Ground in Japan

	Pounds.	Dollars.
1924	2 181	318
1925	250	83
1926	849	254
1927	.....	.....

Colors Ground in Water, and Fresco Colors

	Pounds.	Dollars.
1924	116	104
1925	441	287
1926	215	257
1927	1,393	510

Copperas (Ferrous Sulphate, Sulphate of Iron)

	Pounds.	Dollars
1871	1,842,308	9,083
1881	151,496	956
1891	898,937	4,104
1901	24,786	243
1913	6,196	174
1914	1,120	18
1915	4,750	95
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	377,613	4,869
1921	119,947	1,733
1922	240,517	2,022
1923	758,046	7,870
1924	1,505,794	11,360
1925	839,492	6,039
1926	237,514	4,163
1927	595,807	9,449

Copper Oxide and Suboxide

	Pounds.	Dollars.
1924	46,389	7,047
1925	91,245	15,537
1926	192,555	34,419
1927	326,447	54,428

Copper Sulphate or Blue Vitriol

	Pounds.	Dollars.
1871	45,809	2,339
1881	20	3
1891	8,432	310
1901	1,788	95
1913	11,051	728
1914	114,730	5,486
1915	45,239	2,156
1916	184,182	17,651
1917	15,952	2,233
1918	98,143	9,035
1919	120	36
1920	72,605	7,243
1921	676,628	38,370
1922	529,557	23,412
1923	10,083,949	518,381
1924	3,517,880	163,965
1925	1,484,146	66,404
1926	2,870,013	140,676
1927	981,623	44,264

Copra

	Pounds.	Dollars.
1913	34,283,592	1,531,864
1914	44,459,158	2,395,105
1915	88,690,392	3,390,157
1916	108,507,765	4,551,422
1917	247,043,127	12,530,112
1918	486,833,808	26,937,621
1919	300,965,246	19,847,782
1920	218,521,946	15,171,465
1921	192,245,515	9,923,789
1922	255,721,818	9,403,636
1923	306,089,995	12,604,008
1924	299,783,531	12,804,198
1925	328,651,513	15,482,353
1926	392,759,250	20,126,308
1927	454,545,641	21,662,071

Cork, Artificial and Composition or Compressed Cork

	Pounds.	Dollars.
1919	175,331	116,505
1920	.....	.....
1921	6	1
1922	220	41
1923	209	191
1924	594	320
1925	1,143	220
1926	7,151	1,322
1927	1,249	294

Cork Bark, Cut Into Squares, Cubes or Quarters

	Pounds.	Dollars.
1919	5,653	2,927
1920	1,353	462
1921	524	145
1922	1,174	105
1923	799	218
1924	793	253
1925	6,813	720
1926	5,339	739
1927	2,709	918

Cork Disks, Wafers or Washers

	Pounds.	Dollars.
1914	2,065,567	1,675,683
1915	1,926,864	1,165,540
1916	695,776	487,588
1917	2,815,515	1,973,342
1918	2,316,018	1,445,851
1919	706,252	552,857
1920	1,377,958	857,525
1921	995,208	688,193
1922	375,463	247,043
1923	344,973	199,063
1924	327,622	307,688
1925	632,238	558,483
1926	996,282	826,946
1927	721,876	640,000

Cork, Granulated or Ground

	Pounds.	Dollars.
1924	265,249	4,718
1925	354,189	4,203
1926	1,311,760	20,938
1927	1,760,216	31,308

Cork Insulation

	Pounds.	Dollars.
1917	4,038,372	181,698
1918	3,771,294	181,402
1919	2,834,807	177,389
1920	6,710,418	543,494
1921	9,112,332	779,673
1922	13,353,886	603,165
1923	12,720,305	605,375
1924	20,893,457	728,359
1925	21,598,615	818,333
1926	30,758,475	1,401,858
1927	47,164,341	2,861,616

Cork Paper

	Pounds.	Dollars.
1917	.....	138,214
1918	.....	107,462
1919	.....	105,751
1920	.....	85,349
1921	.....	40,243
1922	.....	23,242
1923	.....	13,119
1924	1,602	1,877
1925	111	774
1926	383	1,085
1927	758	1,346

Cork Stoppers

	Pounds.	Dollars.
1891	.....	428,635
1901	1,286,593	534,064
1914	888,500	728,317
1915	326,887	250,342
1916	269,806	170,746
1917	437,550	275,161
1918	365,877	198,378
1919	119,000	69,657
1920	139,829	120,389
1921	218,932	156,512
1922	136,118	87,696
1923	209,677	137,674
1924	272,784	359,869
1925	307,351	413,803
1926	515,692	405,475
1927	427,434	534,462

Cork Tile

	*Sq. ft.	Dollars.
1924	16,800	1,875
1925	88,968	7,981
1926	1,020,817	54,535
1927	584,416	79,828

*Quantity stated in pounds prior to 1927.

Cork Waste, Shavings and Refuse

	Pounds.	Dollars.
1917	120,677,624	1,743,184
1918	95,051,164	1,582,755
1919	101,762,928	1,827,541
1920	146,649,475	2,813,247
1921	130,669,984	3,161,790
1922	151,425,654	2,051,339
1923	167,371,170	2,082,557
1924	150,081,056	1,656,009
1925	138,908,958	1,486,135
1926	153,804,449	1,950,273
1927	131,531,424	2,518,576

Corkwood, or Cork Bark, Unmanufactured

	Pounds.	Dollars.
1871	.....	359,626
1881	.....	787,933
1891	.....	1,249,008
1901	.....	1,727,921
1913	133,227,878	3,152,070
1914	88,282,529	2,646,018
1915	24,897,803	1,420,581
1916	32,866,700	1,517,366
1917	40,273,005	2,125,633
1918	30,750,497	1,479,072
1919	26,505,971	1,736,100
1920	27,376,326	1,456,276
1921	47,804,241	2,373,006
1922	37,434,747	1,023,587
1923	68,817,945	1,826,133
1924	57,324,032	1,541,330
1925	66,857,680	1,265,806
1926	110,468,994	2,350,144
1927	132,581,654	3,088,098

Corrosive Sublimate

	Pounds.	Dollars.
1920	3,306	2,258
1921	665	683
1922	.....	.....
1923	97	94
1924	3,952	2,044
1925	1,402	877
1926	1,482	825
1927	3,979	4,440

Cosmetics and Toilet Preparations, Including Tooth Pastes, Powders, Etc.

	Pounds.	Dollars.
1913	.....	1,026,869
1914	.....	1,086,211
1915	.....	1,542,131
1916	.....	1,271,614
1917	.....	1,702,939
1918	.....	1,502,718
1919	817,171	1,549,184
1920	903,275	455,691
1921	399,657	410,854
1922	1,250,502	844,575
1923	1,346,505	804,433
1924	1,221,220	718,969

Subdivided after 1924.

Cosmetics and Toilet Preparations, Including Tooth Paste, Powders, Etc., Containing Alcohol

	Pounds.	Dollars.
1925	77,220	179,726
1926	58,879	140,538
1927	44,182	102,390

Cosmetics and Toilet Preparations, Including Tooth Paste, Powders, Etc., Not Containing Alcohol

	Pounds.	Dollars.
1925	1,014,140	576,070
1926	1,138,535	552,340
1927	1,177,824	663,868

Crayons, Including Charcoal Crayons or Fusains

	*Gross.	Dollars.
1871	.....	2,582
1881	.....	10,047
1891	.....	18,028
1901	.....	9,030
1913	.....	12,925
1914	.....	18,359
1915	.....	15,090
1916	.....	11,535
1917	.....	12,945
1918	.....	10,282
1919	14,330	11,376
1920	16,777	11,284
1921	40,673	16,363
1922	97,358	27,525
1923	50,660	20,212
1924	29,663	25,643
1925	22,392	15,794
1926	25,945	20,747
1927	29,512	22,971

*Quantity stated in pounds prior to 1925.

Cream of Tartar

	Pounds.	Dollars
1871	3,605,401	639,467
1881	29	7
1891	778	158
1901	145	59
1913	66,718	11,797
1914	812,857	156,987
1915	764,868	166,922
1916	38,588	13,479
1917	98,609	28,488
1918	68,586	16,068
1919	.....	.....
1920	123,017	52,300
1921	578,641	166,048
1922	1,286,977	230,346
1923	1,823,108	230,538
1924	652,129	69,565
1925	318,532	43,342
1926	218,392	31,632
1927	.....	.....

Crotonaldehyde

	Pounds.	Dollars
1924	2,072	329
1925	9,102	3,539
1926	6,449	2,248
1927	38,948	8,672

Crucibles, Graphite

	Number.	Dollars.
1924	1,555	450
1925	.....	.....
1926	9,588	7,394
1927	5,524	6,850

Crucibles of Stone and Earthenware, Undecorated

	Number.	Dollars.
1914	.....	10,974
1915	.....	6,764
1916	.....	7,641
1917	.....	58,161
1918	.....	7,860
1919	.....	1,432
1920	.....	9,880
1921	.....	8,634
1922	.....	6,951
1923	.....	10,586
1924	99,309	8,680
1925	62,135	6,111
1926	154,114	8,592
1927	100,405	6,702

Cryolite, or Kryolith

	Tons.	Dollars.
1871	.....	71,058
1881	.....	103,529
1891	7,129	95,405
1901	6,167	82,533
1913	2,519	52,440
1914	2,157	47,435
1915	4,569	91,417
1916	3,962	84,497
1917	3,835	163,475
1918	4,383	218,600
1919	19,951	97,500
1920	2,130	106,500
1921	3,866	194,158
1922	3,477	296,888
1923	5,125	256,759
1924	5,130	257,200
1925	6,345	324,790
1926	9,892	699,286
1927	7,713	564,233

Cubebs

	Pounds.	Dollars.
1871	64,431	3,686
1881	131,850	21,505
1891	65,404	46,530
1901	310,172	22,248
1913	166,307	53,663
1914	105,665	32,456
1915	87,538	23,451
1916	89,300	28,566
1917	123,558	43,442
1918	76,895	45,034
1919	147,604	57,564
1920	139,158	103,026
1921	127,667	121,595
1922	40,482	23,074
1923	106,068	64,726
1924	91,087	43,558
1925	55,018	25,959
1926	95,279	33,566
1927	71,675	22,065

Cudbear, Archil and Litmus

	Pounds.	Dollars.
1871	.....	40,253
1881	1,931,357	232,360
1891	402,241	37,880
1901	44,332	2,964
1913	27,971	1,775
1914	15,658	1,061
1915	24,827	1,880
1916	55,948	6,512
1917	49,163	6,105
1918	62,504	10,166
1919	44,432	6,012
1920	34,004	4,857
1921	46,647	7,874
1922	29,059	4,984
1923	.....	.....
1924	261,866	29,835
1925	179,255	27,089
1926	160,616	21,429
1927	150,804	25,937

Cumene, Cymene

	Pounds.	Dollars.
1925	499	135
1926	.....	.....
1927	.....	.....

Curry and Curry Powder

	Pounds.	Dollars.
1871	.....	569
1881	.....	3,893
1891	.....	5,103
1901	.....	7,852
1913	.....	12,087
1914	.....	11,807
1915	.....	9,872
1916	.....	8,669
1917	.....	10,624
1918	.....	9,248
1919	11,800	4,606
1920	35,975	13,651
1921	32,403	10,206
1922	20,537	8,465
1923	19,871	8,433
1924	31,464	12,436
1925	31,708	11,661
1926	33,732	13,925
1927	37,903	15,840

Cutch Extract

	Pounds.	Dollars.
1924	540,161	37,124
1925	422,719	31,541
1926	319,414	29,553
1927	692,136	41,948

Cuttlefish Bone

	Pounds.	Dollars.
1901	193,494	23,590
1913	218,317	30,355
1914	309,540	56,051
1915	282,239	52,041
1916	214,659	36,576
1917	230,271	52,838
1918	247,250	57,536
1919	186,633	73,380
1920	360,538	122,047
1921	375,251	86,812
1922	206,028	29,020
1924	345,245	43,947
1925	248,461	39,559
1926	298,205	41,519
1927	257,993	27,229

Cyanide Salts, Mixtures, and Compounds

	Pounds.	Dollars.
1924	1,027,078	71,438
1925	230,239	19,572
1926	128,763	9,303
1927	66,151	54,269

Dandelion Root

	Pounds.	Dollars.
1881	33,119	2,966
1891	59,929	3,593
1901	73,573	4,078
1913	108,434	8,269
1914	109,658	9,389
1915	112,814	12,137
1916	29,378	6,487
1917	108,713	28,912
1918	149,088	37,773
1919	77,165	16,600
1920	201,708	28,139
1921	182,907	29,021
1922	114,808	6,989
1923	97,564	9,209

Included in "Acorns, Chicory and Dandelion Root" after 1923.

Decalcomania Paper, Duplex, Not Printed

	Pounds.	Dollars.
1927	700,052	162,978

Decalcomanias in Ceramic Colors

	Pounds.	Dollars.
1913	80,094	144,890
1914	45,999	92,528
1915	22,411	62,462
1916	11,176	32,882
1917	8,471	27,393
1918	5,195	22,206
1919	2,984	14,304
1920	4,905	19,616
1921	6,301	30,741
1922	2,842	19,362
1923	94,073	136,331
1924	198,329	293,167
1925	233,134	338,948
1926	317,073	462,385
1927	364,927	486,683

Decalcomanias Backed with Metal Leaf

	Pounds.	Dollars.
1924	138	327
1925	886	1,529
1926	29	181
1927	127	944

Decalcomanias, Other, Except Toys

	Pounds.	Dollars.
1913	41,870	42,001
1914	132,805	131,494
1915	90,040	87,641
1916	51,840	55,634
1917	66,513	60,844
1918	34,858	41,300
1919	55,236	85,068
1920	71,740	78,516
1921	137,825	181,380
1922	138,244	181,071
1923	53,550	61,522
1924	41,844	52,564
1925	33,966	55,253
1926	43,033	73,324
1927	53,163	74,023

Imports Into the United States

Dextrine Made from Potato Starch or Potato Flour

	Pounds.	Dollars.
1914	5,226,421	162,698
1915	4,595,949	154,337
1916	720,106	40,[illegible]
1917	210,948	17,88[illegible]
1918	99,228	9,116
1919	421,971	39,583
1920	681,224	59,887
1921	566,670	35,824
1922	1,367,844	80,858
1923	1,711,615	66,956
1924	1,794,571	74,618
1925	1,131,582	59,542
1926	1,445,793	66,649
1927	1,199,853	57,206

Dextrose and Dextrose Syrup

	Pounds.	Dollars.
1924	33,266	1,344
1925	1,599	189
1926	.....	.....
1927	1,350	333

Diamonds, Glaziers', Engravers' and Miners', Unset

	Carats.	Dollars.
1871	.....	976
1881	.....	233,596
1891	.....	407,188
1901	.....	4,071
1913	.....	368,241
1914	.....	101,839
1915	.....	258,272
1916	.....	738,085
1917	.....	948,592
1918	.....	1,049,975
1919	18,793	632,129
1920	42,161	1,270,040
1921	41,058	1,088,441
1922	20,927	258,562
1923	36,611	1,017,689
1924	32,174	1,098,337
1925	44,455	1,559,377
1926	43,003	2,050,758
1927	39,969	2,026,788

Digitalis

	Pounds.	Dollars.
1924	16,777	1,756
1925	20,190	1,543
1926	36,276	5,815
1927	69,529	9,317

Digitalis Glucosides and Active Principles of Digitalis

	Pounds.	Dollars.
1924	86	1,614
1925	50	177

Not stated after 1925.

Dihydroxnyaphthalene and Dianisidin

	Pounds.	Dollars.
1926	1,000	540
1927	55	142

Dimethylanilin and Benzylethylanilin

	Pounds.	Dollars.
1921	8,188,532	165,639
1922	23,565	3,828
1923	1	2
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	2,383	2,219

Diphenylamine

	Pounds.	Dollars.
1924	1,131	218
1925	23,587	8,158
1927	400	1,315
1926	32	104

Divi-Divi

	Pounds.	Dollars.
1901	853,573	12,505
1913	314,491	4,143
1914	29,032	461
1915	4,513,219	71,367
1916	16,467,455	310,572
1917	15,969,144	293,191
1918	15,739,331	274,891
1919	26,556,867	522,913
1920	26,632,840	580,972
1922	7,558,995	91,405
1923	11,153,869	145,125
1924	4,923,697	78,589
1925	3,912,016	79,707
1926	1,764,547	35,641
1927	3,646,775	80,226

Divi-Divi Extract for Tanning

	Pounds.	Dollars.
1926	1,202	67
1927	.....	.....

Dyeing Materials, Crude, Not Elsewhere Specified

	*Pounds.	Dollars.
1871	16,598	647,224
1881	4,947	159,900
1891	1,002	28,960
1901	14,985	151,849
1913	155	1,794
1914	371	6,097
1915	1,530	20,674
1916	7,043	172,765
1917	6,745	48,211
1918	16,489	425,942
1919	2,153	52,196
1920	2,339	49,913
1921	2,342	51,082
1922	4,731	118,406
1923	14,663	477,328
1923	6,912,336	174,955
1925	9,140,366	152,334
1926	7,250,262	111,016
1927	7,059,379	66,473

* Quantity stated in tons prior to 1923.

Dye Extracts, Nonalcoholic and Not Medicinal

	Pounds.	Dollars.
1924	1,297,786	118,435
1925	511,139	72,565
1926	241,277	27,504
1927	580,697	65,760

Eggs, Dried

	Pounds.	Dollars.
1913	20,284	7,537
1914	38,061	12,040
1915	30,573	10,385
1916	38,993	9,875
1917	1,590,563	417,417
1918	1,598,630	429,167
1919	741,972	419,799
1920	3,311,350	1,812,648
1921	2,419,997	1,086,318
1922	1,964,725	730,919
1923	2,355,214	884,016
1924	2,004,458	840,063
1925	2,218,571	1,045,553
1926	1,913,884	1,021,307
1927	1,603,075	819,493

Eggs, Frozen or Otherwise Prepared or Preserved

	Pounds.	Dollars.
1914	2,647,974	305,232
1915	2,815,511	198,654
1916	3,756,188	248,997
1917	2,171,338	178,027
1918	1,250,574	153,870
1919	1,210,321	245,494
1920	6,579,489	1,030,364
1921	10,133,235	1,593,782
1922	6,351,612	678,364
1923	5,546,892	612,040
1924	5,324,991	824,476
1925	9,181,565	1,358,594
1926	10,252,586	1,587,544
1927	9,041,405	1,633,202

Eggs, Poultry, in the Shell

	Dozens.	Dollars.
1871	.....	569,493
1881	8,569,568	1,087,250
1891	8,219,339	1,186,074
1901	127,685	10,572
1913	1,271,765	191,714
1914	5,823,749	1,039,595
1915	3,058,863	440,087
1916	733,313	110,638
1917	1,103,187	287,822
1918	1,619,259	482,636
1919	846,573	232,491
1920	1,348,388	466,753
1921	3,315,805	1,056,359
1922	1,223,540	327,566
1923	533,659	158,584
1924	372,507	110,488
1925	550,006	159,588
1926	275,873	97,912
1927	295,672	96,564

Egg Yolks

	Pounds.	Dollars.
1881	.....	2,454
1891	.....	18
1901	.....	195
1913	227,457	37,097
1914	675,058	168,972
1915	1,382,408	257,607
1916	2,919,919	373,152
1917	6,924,071	1,332,095
1918	8,077,730	2,029,420
1919	4,746,015	1,648,564
1920	9,044,186	3,909,927
1921	10,312,080	3,206,752
1922	8,379,098	1,873,490
1923	6,572,885	1,433,828

Subdivided after 1923.

Egg Yolks, Dried

	Pounds.	Dollars.
1924	3,067,153	904,563
1925	4,775,757	1,236,180
1926	5,912,393	1,552,840
1927	4,063,733	1,366,025

Egg Yolks, Frozen or Otherwise Prepared

	Pounds.	Dollars.
1924	3,272,392	569,887
1925	5,640,653	950,899
1926	4,849,098	819,478
1927	4,537,387	798,933

Ergot

	Pounds.	Dollars.
1871	17,805	6,898
1881	137,618	45,156
1891	88,620	26,932
1901	164,446	80,952
1913	223,793	208,364
1914	185,704	102,640
1915	141,915	92,459
1916	12,015	73,896
1917	165,701	80,647
1918	140,474	81,267
1919	116,813	149,890
1920	125,021	361,558
1921	213,491	690,224
1922	167,315	155,921
1923	273,784	140,058
1924	195,425	52,307
1925	163,759	45,778
1926	192,056	113,180
1927	224,622	195,140

Ethers, Amyl Acetate

	Pounds.	Dollars.
1924	13,065	4,426
1925	6,921	2,336
1926	18,692	7,154
1927	626	334

Ethers, Diethyl Sulphate

	Pounds.	Dollars.
1924	83	246
1925	375	1,353
1926	311	2,035
1927	30,066	7,221

Ethers, Ethyl Acetate, or Acetic Ether

	Pounds.	Dollars.
1920	400	493
1921	.....	.....
1922	230	284
1923	27,163	11,658
1924	267	40
1925	1,141	719
1926	12,477	1,621
1927	21	4

Ethers, Ethyl Chloride

	Pounds.	Dollars.
1913	11,241	7,903
1914	9,014	10,046
1915	.....	.....
1915	2,780	5,103
1917	8,917	5,207
1918	1,274	2,411
1919	22,495	2,250
1920	877	685
1921	7,009	6,482
1922	13,150	2,757
1923	17,335	19,850
1924	7,187	8,839
1925	15,462	18,146
1926	855	1,088
1927	642	749

Ethers, Sulphuric

	Pounds.	Dollars.
1891	8	1
1901	109	30
1913	755	120
1914	915	131
1915	849	189
1916	62	23
1917	.....	.....
1918	8	7
1919	282,576	28,258
1920	100	34
1921	.....	.....
1922	988	384
1923	134	27
1924	50	80
1925	72	110
1926	11	22
1927	.....	.....

Ethers, Containing Not More than 10 Percent Alcohol, N. E. S.

	Pounds.	Dollars.
1921	269	796
1922	2,177	1,068
1923	7,125	4,220
1924	10,683	5,457
1925	46,894	21,175
1926	77,693	41,112
1927	2,717,789	410,897

Ethers, Containing More than 10 Percent Alcohol, N. E. S.

	Pounds.	Dollars.
1901	698	1,119
1914	.....	1,868
1915	66	64
1916	140	169
1917	.....	.....
1918	880	182
1919	.....	.....
1920	.....	.....
1921	240	274
1922	1,316	1,319
1923	50,867	6,055
1924	1,247	1,505
1925	7,192	14,331
1926	1,060	1,132
1927	2	3

Ethylene, Chlorohydrin, Dichloride, Glycol and Oxide

	Pounds.	Dollars.
1925	25,124	10,934
1926	1,711	831

Stated separately after 1926.

Ethylenechlorohydrin

	Pounds.	Dollars.
1927	882	412

Ethyleneglycol

	Pounds.	Dollars.
1927	1,577	429

Eucalyptol

	Pounds.	Dollars.
1924	3,960	403
1925	120	123
1926	899	331
1927	884	534

Explosives from Coal Tar

	Pounds	Dollars
1872	.....	40,119
1881	.....	42,994
1891	.....	.....
1901	31,638	8,554
1913	85,068	18,339
1914	.....	.....
1915	20,091	4,278
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	3,240,500	254,385
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	462	1,373
1924	1,518	2,953
1925	.....	.....
1926	.....	.....
1927	.....	.....

Ferric Chloride (Iron Perchloride)

	Pounds.	Dollars.
1924	114,988	6,644
1925	62,579	3,704
1926	187,389	17,771
1927	528,339	15,484

Ferromanganese

	Tons.	Dollars
1919	24,009	4,120,794
1920	38,973	8,980,743
1921	48,198	6,057,802
1922	31,164	1,877,094
1923	118,435	8,770,834
1924	56,776	4,605,681
1925	68,405	5,902,225
1926	48,197	4,766,798
1927	33,704	2,229,878

Ferrophosphorus

	*Pounds.	Dollars.
1913	81	3,689
1914	26	1,136
1915	27	1,213
1916	12	617
1917	85	5,458
1918	10	1,055
1919	109,141	3,639
1920	61,665	2,207
1921	14,000	780
1922	11,997	132
1923	.....	.....
1924	.....	.....
1925	4,760	460
1926	99,207	3,377
1927	4,341,132	143,937

* Tons prior to 1919.

Ferrosilicon

	*Pounds.	Dollars.
1919	6,091	521,142
1920	17,855	891,108
1921	7,361	307,991
1922	10,977	524,355
1923	18,511	1,232,251
1924	25,865,275	1,171,755
1925	11,186,238	451,944
1926	15,818,765	807,329
1927	29,143,719	1,428,030

*Quantity stated in tons prior to 1924.

Ferrovanadium

	Pounds.	Dollars
1920	19,189	39,254
1921	.....	.....
1922	.....	.....
1923	1,160	3,770
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	1,658	328

Fertilizers, Tankage

	Tons.	Dollars.
*1925	29,792	914,459
*1926	26,434	959,792
1927	23,286	951,080

Fertilizers, Not Specially Provided For

	Tons.	Dollars.
1891	14,792	221,467
1901	72,239	640,428
1913	115,257	2,190,816
1914	197,165	4,241,285
1915	100,155	2,208,193
1916	73,252	1,591,517
1917	71,374	1,521,307
1918	63,815	1,772,684
1919	55,775	2,260,253
1920	123,287	4,752,048
1921	113,383	5,434,428
1922	89,647	2,396,817
1923	117,426	3,646,490
1924	110,943	2,338,149
1925	37,429	684,617
1926	154,766	3,154,204
1927	85,607	1,589,146

Fish Sounds, Crude

	Pounds.	Dollars.
1916	396,031	96,201
1917	456,738	104,654
1918	331,248	78,499
1919	150,411	38,876
1920	80,781	9,210
1921	131,136	31,051
1922	38,486	11,242
1923	44,724	8,120
1924	112,292	28,023
1925	147,653	40,067
1926	131,091	40,472
1927	85,152	17,600

Filter Masse or Filter Stock

	Pounds.	Dollars
1914	486,476	53,474
1915	349,498	41,880
1916	54,349	8,356
1917	65,052	10,304
1918	48,210	13,917
1919	6,605	1,097
1920	65,750	9,048
1921	146,282	26,455
1922	109,089	11,792
1923	171,008	18,043
1924	274,358	27,263
1925	203,674	26,348
1926	254,542	40,382
1927	262,516	37,743

Filter Tubes

	Number.	Dollars.
1901	.....	6,053
1913	.....	6,038
1914	.....	7,437
1915	.....	6,639
1916	.....	2,769
1917	.....	7,359
1918	.....	3,135
1919	.....	2,481
1920	.....	3,105
1921	.....	2,832
1922	.....	630
1923	.....	693
1924	104,410	2,409
1925	.....	.....
1926	.....	.....
1927	50	144

Filtering Paper

	Pounds.	Dollars
1924	589,088	190,354
1925	527,486	197,600
1926	502,345	206,193
1927	579,820	231,463

Flavoring Extracts

	Pounds.	Dollars.
1918	4,938	6,383
1919	3,431	11,293
1920	5,057	9,173
1921	43,625	30,693
1922	671,523	409,930
1923	772,164	387,240

Subdivided after 1923.

Flavoring Extracts Containing No Alcohol

	Pounds.	Dollars.
1924	89,607	67,061
1925	83,637	51,731
1926	93,372	57,061
1927	106,414	76,389

Flavoring Extracts, Containing Alcohol

	Pounds.	Dollars.
1924	73,690	38,599
1925	97,025	92,340
1926	126,813	122,426
1927	105,398	134,954

Flavors (Coal Tar Product)

	Pounds.	Dollars
1924	11	13
1925	.....	.....
1926	2	33
1927	.....	.....

Floral Essences and Concretes

	Pounds.	Dollars.
1914	.....	87,086
1915	.....	145,973
1916	.....	265,956
1917	.....	405,936
1918	.....	250,531
1919	.....	54,010
1920	.....	174,097
1921	.....	176,198
1922	.....	185,859
1923	.....	989,811
1924	23,736	1,034,443
1925	39,370	2,251,766
1926	18,382	1,246,744
1927	15,991	1,472,903

Floral and Flower Waters Containing No Alcohol, N. E. S.

	Pounds.	Dollars.
1913	.....	31,710
1914	.....	50,297
1915	.....	22,216
1916	.....	34,461
1917	.....	29,279
1918	.....	52,253
1919	.....	274,648
1920	.....	23,992
1921	.....	61,407
1922	.....	24,156
1923	.....	25,056
1924	198,036	18,402
1925	121,905	15,232
1926	129,276	15,083
1927	93,169	16,793

Fluorspar

	Tons.	Dollars.
1913	23,786	77,535
1914	13,663	50,943
1915	6,925	27,951
1916	8,808	32,482
1917	12,008	87,380
1918	10,936	117,279
1919	10,367	149,605
1920	11,312	146,151
1921	18,068	219,557
1922	8,661	86,678
1923	14,454	378,443
1924	47,366	567,109
1925	49,175	570,641
1926	44,413	487,600
1927	70,607	698,406

Formaldehyde Solution

	Pounds.	Dollars.
1914	14,228	1,443
1915	7,700	814
1916	79,857	8,054
1917	23,935	2,349
1918	223,402	40,691
1919	162	71
1920	195,878	92,944
1921	274,000	125,819
1922	45,594	8,246
1923	466	117
1924	.....	.....
1925	9	16
1926	396	431
1927	1,347	60

Imports Into the United States

Fuller's Earth

	Tons.	Dollars.
1911	16,813	125,899
1912	16,175	188,111
1913	16,866	145,588
1914	19,867	174,276

Subdivided after 1914; see below.

Fuller's Earth Unwrought and Unmanufactured

	Tons.	Dollars.
1871	326	3,383
1881	268	3,207
1891	.....	.....
1901	2,653	16,006
1915	745	5,268
1916	1,067	7,825
1917	975	7,846
1918	1,348	14,552
1919	657	7,800
1920	334	6,413
1921	1,222	16,561
1922	394	5,721
1923	850	12,569
1924	284	4,485
1925	212	2,671
1926	213	2,751
1927	216	3,255

Fuller's Earth, Wrought or Manufactured

	Tons.	Dollars.
1901	7,352	55,450
1915	18,754	163,540
1916	14,973	135,845
1917	15,077	159,071
1918	13,435	177,102
1919	13,036	205,219
1920	14,461	199,284
1921	11,015	145,377
1922	8,537	122,261
1923	9,534	142,093
1924	5,901	85,171
1925	6,608	98,420
1926	7,839	120,772
1927	6,607	101,490

Fustic

	*Pounds.	Dollars.
1881	8,677	130,490
1891	9,100	132,842
1901	7,140	83,695
1913	3,785	53,303
1914	7,121	100,501
1915	12,354	179,959
1916	17,469	289,913
1917	5,195	142,431
1918	16,259	435,428
1919	4,486	83,096
1920	929	16,567
1921	2,504	36,683
1922	4,390	85,912
1923	4,335	67,249
1924	10,927,089	87,529
1925	5,137,250	42,522
1926	9,622,638	71,030
1927	9,034,854	65,516

* Quantity stated in tons prior to 1924.

Fustic Extract

	Pounds.	Dollars.
1924	112	22
1925	579	170
1926	7,586	2,426
1927	11,220	2,821

Gas Black

	Pounds.	Dollars.
1926	130	8
1927	2,100	210

Gas Liquor, Ammoniacal

	Pounds.	Dollars.
1913	.....	35,245
1914	.....	29,336
1915	.....	31,466
1916	.....	26,733
1917	.....	23,335
1918	.....	5,059
1919	.....	.....
1920	.....	18,672
1921	.....	7,571
1922	.....	35,156
1923	.....	24,819
1924	734,227	20,566
1925	1,561,747	40,563
1926	115,871	4,675
1927	736,125	2,226

Gelatin, Unmanufactured, Edible

	Pounds.	Dollars.
1871	.....	55,095
1891	533,812	251,833
1901	700,770	303,054
1913	1,085,940	279,802
1914	2,439,440	768,215
1915	2,708,362	916,368
1916	1,657,065	319,173
1917	967,920	309,524
1918	369,115	133,873
1919	183,716	99,068
1920	1,112,589	573,889
1921	2,262,392	1,171,256
1922	2,460,908	959,719
1923	2,000,118	840,499
1924	3,379,917	871,071
1925	3,124,789	664,507
1926	2,757,499	572,967
1927	2,520,883	480,325

Gelatin, Unmanufactured, Inedible

	Pounds.	Dollars.
1926	911,217	523,503
1927	1,733,401	932,488

Gentian Root

	Pounds.	Dollars.
1881	102,297	3,393
1891	214,645	5,941
1901	574,212	16,758
1913	1,796,928	88,281
1914	2,181,935	109,119
1915	1,022,252	55,553
1916	788,307	63,240
1917	1,780,044	218,377
1918	382,590	46,816
1919	188,402	26,063
1920	913,343	92,524
1921	1,051,380	78,862
1922	206,656	13,042
1923	663,685	45,766
1924	529,266	31,946
1925	769,119	39,821
1926	595,272	29,834
1927	444,943	24,212

Ginger Root, Unground, Not Preserved or Candied

	Pounds.	Dollars.
1901	3,507,680	194,605
1913	7,856,401	406,197
1914	3,006,132	146,792
1915	3,310,391	156,973
1916	5,793,845	391,965
1917	4,307,279	411,965
1918	5,157,531	431,245
1919	2,586,644	212,975
1920	9,088,228	1,205,962
1921	4,649,429	583,362
1922	5,071,760	583,301
1923	5,610,993	614,803
1924	4,218,426	560,291
1925	4,224,720	590,440
1926	2,[illegible]30	382,962
1927	4,[illegible]29	321,868

Ginseng

	Pounds.	Dollars.
1924	9,484	42,566
1925	10,319	99,517
1926	5,425	45,246
1927	7,982	63,449

Gland Extracts, Suprarenal, Thyroid and Other

	Pounds.	Dollars.
1926	.....	150
1927	300	2,917

Glass Sand

	Tons.	Dollars.
1924	610	2,601
1925	6,365	2,622
1926	6,549	5,599
1927	9,102	8,826

Glass Bottles, Vials and Jars, Plain Green or Colored, Molded or Pressed, and Flint, Lime, or Lead, Empty

	Pounds.	Dollars.
1913	.....	205,267
1914	.....	214,130
1915	3,561,200	83,688
1916	1,351,813	24,049
1917	850,946	19,231
1918	114,725	5,635
1919	199,869	7,531
1920	485,891	25,503
1921	1,481,864	91,008
1922	1,401,725	67,923

Quantity not stated prior to 1915.
Not stated separately after 1922.

Glass Bottles and Bottle Glassware, Blown in a Mold, or Otherwise

	Pounds.	Dollars.
1919	126,995	32,874
1920	81,665	32,801
1921	183,926	19,065
1922	335,116	34,444
1923	152,035	35,366
1924	150,366	81,331
1925	207,617	128,582
1926	.....	136,808
1927	.....	187,263

Quantity not stated after 1925.

Glass Bottles, Vials, Jars, Demijohns and Carboys, Empty

		Dollars.
1924	.....	177,327
1925	.....	145,465
1926	.....	254,531
1927	.....	217,470

Glass, Cylinder and Crown, Unpolished, Silvered

	Sq. feet.	Dollars.
1914	56,494	3,998
1915	54,393	2,021
1916	12	1
1917	429	45
1918	8,846	1,159
1919	150	15
1920	5,150	911
1921	7,711	1,843
1922	77,367	14,180

Not stated after 1922.

Glass, Cylinder and Crown, Polished, Not Bent or Decorated

	Sq. feet.	Dollars.
1913	579,129	119,395
1914	615,337	121,814
1915	196,274	36,783
1916	108,578	19,893
1917	.....	.....
1918	255	307
1919	.....	.....
1920	15,176	7,697
1921	131,171	108,770
1922	144,215	89,653
1923	760,964	371,412
1924	872,937	425,939
1925	514,490	203,906
1926	614,724	234,984
1927	380,740	170,766

Glass, Cylinder and Crown, Polished When Bent or Decorated

	Sq. feet.	Dollars.
1913	247,428	60,269
1914	147,482	36,116
1915	43,385	10,076
1916	5,321	1,353
1917	39	67
1918	.....	.....
1919	.....	.....
1920	668	232
1921	2,961	3,426
1922	2,671	508
1923	31,982	20,583
1924	21,892	9,802
1925	16,796	11,971
1926	22,474	10,396
1927	14,107	4,860

Glass, Cylinder and Crown, Polished, Silvered, Not Bent or Decorated

	Sq. feet.	Dollars.
1914	90,657	20,405
1915	89,346	19,597
1916	8,798	1,906
1917	.....	.....
1918	15	15
1919	.....	.....
1920	22,091	8,302
1921	111,357	156,064
1922	131,251	63,315

Not stated separately after 1922.

Glass, Cylinder and Crown, Silvered, Not Bent or Decorated

	Sq. ft.	Dollars.
1923	211,088	111,855
1924	176,293	90,899
1925	177,298	88,680
1926	117,487	58,734
1927	41,926	18,530

Glass, Cylinder and Crown, Silvered, Bent or Decorated

	Sq. feet.	Dollars.
1920	11,506	6,058
1921	28	35
1922	7,174	4,971
1923	34,465	15,532
1924	17,330	8,407
1925	94,430	38,426
1926	13,756	6,780
1927	3,645	2,980

Glass Demijohns and Carboys, Covered or Uncovered, Empty

	Pounds.	Dollars.
1914	.....	3,899
1915	27,990	800
1916	4,731	298
1917	.....	.....
1918	2,528	209
1919	4,905	3,043
1920	250	16
1921	10,858	3,206
1922	24,639	473

Not stated after 1922.

Glass, Plate, Fluted, Rolled, Ribbed or Rough, Containing a Wire Netting

	Sq. feet.	Dollars.
1913	379,219	14,812
1914	436,587	15,207
1915	307,516	12,742
1916	69,272	4,526
1917	18,240	2,002
1918	17,656	2,239
1919	6,978	2,458
1920	19,053	3,940
1921	220,674	19,100
1922	293,718	29,388
1923	1,650,868	128,001
1924	2,479,556	707,076
1925	1,462,304	151,712
1926	1,512,227	114,452
1927	1,275,832	104,006

Glass, Plate—Cast, Polished, Unsilvered

	Sq. feet.	Dollars.
1927	19,747,594	6,417,194

Glass, Plate—Cast, Polished, Unsilvered, Containing a Wire Netting

	Sq. feet.	Dollars.
1913	1,068,427	247,015
1914	2,819,386	631,596
1915	440,718	100,400
1916	12,782	3,778
1917	13,484	13,787
1918	.....	.....
1919	.....	.....
1920	430,253	309,932
1921	3,484,398	3,008,343
1922	4,750,252	2,170,100
1923	3,117,692	1,437,985
1924	116,439	66,568
1925	153,787	77,231
1926	441,748	156,170
1927	246,327	137,678

Glass, Plate—Cast, Polished, Unsilvered, When Bent or Decorated, Etc.

	Sq. feet.	Dollars.
1927	158,505	138,949

Glass Plate—Cast, Polished, Unsilvered When Bent or Decorated, Etc., Containing a Wire Netting

	Sq. feet.	Dollars.
1913	88,189	47,449
1914	140,806	62,228
1915	27,121	14,531
1916	7,147	2,726
1917	3,334	1,542
1918	.....	.....
1919	273	210
1920	4,236	2,766
1921	28,396	26,663
1922	115,583	62,217
1923	204,314	131,654
1924	1,064	771
1925	4,109	3,023
1926	9,613	9,674
1927	307,127	104,801

Glass, Plate—Cast, Polished, Silvered and L. G. Plates, Exceeding in Size 144 Square Inches

	Sq. feet.	Dollars.
1913	832	527
1914	18,229	4,883
1915	2,592	904
1916	2,557	515
1917	35	116
1918	181	82
1919	26	122
1920	6,939	5,459
1921	49,369	38,767
1922	74,312	38,745
1923	110,320	61,317
1924	122,363	39,492
1925	56,145	27,704
1926	97,369	49,859
1927	116,689	48,879

Glass, Plate—Cast, Polished, Silvered When Bent or Otherwise Decorated

	Sq. feet.	Dollars.
1913	1,510	1,004
1914	19,659	5,854
1915	6,822	2,152
1916	2,570	2,135
1917	14	35
1918	104	94
1919	.....	.....
1920	66	115
1921	45	85
1922	213	508
1923	17,043	11,505
1924	20,926	16,843
1925	4,458	3,519
1926	8,839	5,328
1927	13,762	8,135

Glass, Window

	Pounds.	Dollars.
1871	37,929,875	1,495,170
1881	45,612,593	1,471,914
1891	61,577,799	1,512,703
1901	29,967,415	970,073

Stated in detail for later years.

Glass, Window—Cylinder, Crown, Unpolished

	Pounds.	Dollars.
1913	20,458,971	804,782
1914	31,197,531	1,212,536
1915	16,532,210	679,228
1916	1,401,572	140,262
1917	2,594,979	277,222
1918	572,614	84,018
1919	360,953	25,616
1920	2,448,115	250,649
1921	29,173,325	1,639,579
1922	50,053,037	2,532,986
1923	49,752,402	2,177,743
1924	36,391,925	1,828,966
1925	40,978,427	2,254,345
1926	58,619,467	2,613,573
1927	88,390,861	3,054,253

Glass, Window—Cylinder, Crown and Common, Unpolished When Bent or Decorated

	Pounds.	Dollars.
1913	1,773,023	153,723
1914	1,703,186	149,203
1915	460,017	56,228
1916	339,009	52,051
1917	370,522	47,069
1918	131,139	19,010
1919	159,103	29,829
1920	735,168	97,321
1921	1,060,676	121,594
1922	755,814	79,795
1923	828,142	117,911
1924	1,070,743	138,999
1925	1,770,580	196,290
1926	2,127,708	221,549
1927	2,879,299	254,154

Glass, Plate, Fluted, Rolled, Ribbed or Rough, Ground, Smoothed or Otherwise Obscured

	Sq. feet.	Dollars.
1913	9,617	2,247
1914	614,012	126,917
1915	4,872	1,074
1916	489	124
1917	5,952	402
1918	3,996	391
1919	.....	.....
1920	46,087	34,754
1921	439,004	317,730
1922	298,170	142,171
1923	15,891,418	8,801,516
1924	24,782,875	15,852,610
1925	15,144,470	6,719,074
1926	19,804,179	7,396,500
1927	8,299	4,961

Glauber's Salt

	Tons.	Dollars.
1871	118	2,879
1881	.....	15
1891	108	2,167
1901	305	6,826
1913	240	5,685
1914	228	5,557
1915	53	1,113
1916	1	33
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	1	36
1921	44	710
1922	7,102	80,710
1923	6,943	76,275
1924	6,312	74,952
1925	5,541	71,405
1926	4,387	54,306
1927	2,870	32,657

Glazes, Fluxes, Enamels and Colors, Ceramic and Glass

	Pounds.	Dollars.
1914	.....	38,527
1915	.....	70,782
1916	.....	64,138
1917	.....	43,421
1918	.....	26,583
1919	19,046	22,839
1920	45,661	48,090
1921	53,907	60,753
1922	52,627	47,835
1923	150,703	102,213
1924	164,568	107,248

Subdivided after 1924.

Glazes, Fluxes, Enamels and Colors, Ceramic and Glass—Ground or Pulverized

	Pounds.	Dollars.
1925	307,150	107,862
1926	506,743	185,493
1927	345,323	104,305

Glazes, Fluxes, Enamels and Colors, Ceramic and Glass—In Other Forms

	Pounds.	Dollars.
1925	106,125	42,515
1926	627,901	208,444
1927	538,794	165,742

Glucose

	Pounds.	Dollars.
1871	.....	412
1881	.....	107,370
1891	815,491	22,038
1901	94,767	2,317
1913	212,635	7,166
1914	262,223	9,025
1915	52,799	1,880
1916	1,233	313
1917	7,696	331
1918	105,551	6,482
1919	400	40
1920	40,267	3,040
1921	50	5
1922	3,631	142

Not stated after 1922.

Glue, Glue Size and Fish Glue Value Less Than 40c. a Pound

	Pounds.	Dollars.
1871	1,578,239	128,528
1881	1,888,005	243,353
1891	5,451,136	485,595
1901	4,530,390	567,992
1913	5,099,681	672,266
1914	22,545,681	1,792,612
1915	8,086,283	702,350
1916	3,050,794	219,177
1917	6,301,825	954,673
1918	2,013,312	342,017
1919	487,617	141,294
1920	1,422,594	373,616
1921	3,214,400	686,322
1922	4,148,656	557,555
1923	6,804,279	699,231
1924	7,401,007	586,883
1925	3,552,007	327,774
1926	6,450,912	507,540
1927	6,817,802	511,497

Glue, Glue Size and Fish Glue, Value at 40c. a Pound or More

	Pounds.	Dollars.
1925	16,458	10,429
1926	2,759	2,356
1927	8,652	6,443

Imports Into the United States

Glue Stock, Including Hide Cuttings, Raw

	Pounds.	Dollars.
1871	.....	123,664
1881	.....	227,131
1891	.....	353,948
1901	.....	1,055,788
1913	.....	1,773,786
1914	.....	2,126,632
1915	.....	1,504,325
1916	.....	970,313
1917	33,631,932	1,451,319
1918	21,415,345	927,923
1919	8,833,386	518,266
1920	26,248,159	1,666,252
1921	36,120,019	2,270,932
1922	25,222,414	1,149,883
1923	29,750,679	1,165,697
1924	28,412,121	1,098,249
1925	29,307,919	1,176,506
1926	33,379,493	1,049,478
1927	46,441,737	1,862,158

Glue, Vegetable

	Pounds.	Dollars.
1924	33,600	2,197
1925	584	74
1926	400	37
1927	168	28

Glycerin, Crude

	Pounds.	Dollars.
1871	213,568	34,498
1881	6,669,531	675,334
1891	11,983,796	974,161
1901	19,393,926	1,803,356
1913	34,399,129	4,247,032
1914	36,230,383	4,473,178
1915	18,661,929	2,185,368
1916	10,875,058	2,209,610
1917	4,078,803	1,260,454
1918	1,925,815	830,145
1919	1,163,952	368,689
1920	15,664,109	1,849,998
1921	11,056,067	1,576,018
1922	2,091,117	287,148
1923	12,893,119	1,289,947
1924	9,848,607	927,346
1925	17,259,224	1,948,994
1926	29,942,635	3,204,945
1927	21,361,098	3,383,618

Glycerin, Refined

	Pounds.	Dollars.
1891	446,044	43,771
1901	1,195,580	128,940
1913	432,339	73,336
1914	551,306	90,562
1915	360,567	60,908
1916	303,463	132,469
1917	137,128	76,361
1918	19,750	17,438
1919	162,916	67,597
1920	1,911,278	414,316
1921	3,960,671	850,834
1922	75,953	16,649
1923	500,339	58,150
1924	256,671	31,305
1925	9,444,530	1,159,854
1926	3,953,418	676,130
1927	12,138,865	2,755,870

Glycol, Monoacetate

	Pounds.	Dollars.
1927	2,796	2,638

Gold Beaters' Molds and Skins

	Number.	Dollars.
1871	.....	22,632
1881	.....	23,806
1891	.....	39,625
1901	.....	38,556
1913	.....	26,408
1914	.....	26,634
1915	.....	13,944
1916	.....	28,131
1917	.....	38,651
1918	.....	22,609
1919	77,635	9,235
1920	34,239	21,262
1921	22,003	62,918
1922	12,210	41,581
1923	12,366	46,097

Stated separately after 1923.

Gold Beaters' Molds

	Number.	Dollars.
1924	982	50,491
1925	650	47,219
1926	702	62,783
1927	578	52,376

Gold Beaters' Skins

	Number.	Dollars.
1924	56,392	1,410
1925	9,004	604
1926	48,322	3,194
1927	2,950	299

Gold Leaf

	*Leaves.	Dollars.
1871	161	3,507
1881	451	10,820
1891	167	3,062
1901	115	2,704
1913	30,902	28,283
1914	37,527	32,482
1915	13,614	12,549
1916	1,547	773
1917	14,370	12,463
1918	8,472	6,334
1919	14	10
1920	5,638	3,792
1921	65,999	64,114
1922	53,735	70,962
1923	87,119	106,625
1924	198,287	252,912
1925	11,502,611	142,667
1926	11,303,963	138,449
1927	10,748,490	114,706

* Quantity stated as 100 leaves prior to 1925.

Grease, Enfleurage

	Pounds.	Dollars.
1891	.....	263,950
1901	137,812	246,869
1913	92,446	124,195
1914	40,638	51,417
1915	28,407	31,578
1916	5,245	8,524
1917	26,636	33,945
1918	23,620	167,861
1919	13,357	196,345
1920	9,720	48,979
1921	19,726	241,958
1922	17,268	228,557
1923	20,472	192,432
1924	12,434	19,209
1925	3,384	10,215
1926	3,657	27,525
1927	9,120	17,986

Grease, Marrow, Crude

	Pounds.	Dollars.
1918	44,366	8,774
1919	232,960	17,738
1920	37,511	4,035
1921	60,090	4,513
1922	25,243	801
1923	.....	.....
1924	2,198	111
1925	.....	.....
1926	93,474	3,202
1927	2,358	278

Grease, Wool, Crude

	Pounds.	Dollars.
1891	7,693,090	191,371
1901	11,627,387	260,648
1913	14,473,551	328,991
1914	12,284,248	292,988
1915	9,281,273	286,705
1916	7,617,713	350,535
1917	4,861,795	294,326
1918	4,481,486	338,877
1919	139,436	17,153
1920	2,366,366	140,909
1921	3,396,285	141,057
1922	6,281,426	149,009
1923	11,311,422	342,697
1924	11,167,852	279,445
1925	8,446,879	240,188
1926	10,255,319	367,962
1927	10,417,378	342,035

Grease, Wool, Refined

	Pounds.	Dollars.
1913	2,009,018	86,474
1914	2,691,591	121,847
1915	467,761	23,418
1916	214,599	14,794
1917	316,149	24,819
1918	31,218	2,552
1919	1,022	257
1920	44,031	1,504
1921	44,682	5,382
1922	159,528	4,396
1923	926,851	59,063
1924	1,218,880	69,753
1925	852,360	56,743
1926	714,072	44,395
1927	2,027,398	157,270

Grease and Oils, Sulphur Oil or Olive Foots

	Pounds.	Dollars.
1913	13,698,352	874,114
1914	11,714,795	772,055
1915	12,946,066	885,810
1916	12,684,936	1,035,292
1917	12,138,516	1,108,099
1918	1,712,640	175,814
1919	613,665	116,275
1920	10,409,509	1,603,499
1921	11,010,970	1,260,908
1922	16,034,593	1,080,945

Not stated after 1922.

Greases, Fats and Other Animal Oils Not Containing Alcohol

	Pounds.	Dollars.
1881	253,808	12,809
1891	2,611,262	108,422
1901	5,202,465	228,129
1913	7,334,605	291,934
1914	10,684,016	449,561
1915	17,800,356	709,330
1916	11,324,635	482,479
1917	8,428,689	482,086
1918	26,345,640	2,591,044
1919	27,684,496	2,585,200
1920	29,271,846	3,203,887
1921	20,411,764	1,407,092
1922	18,798,008	910,983
1923	1,578,473	86,180
1924	56,164	3,934
1925	238,007	20,994
1926	228,344	14,797
1927	156,211	11,674

Grease and Rendered Oil, N. E. S., Containing Alcohol

	Pounds.	Dollars.
1871	.....	38,420
1881	4,048,028	175,883
1891	4,563,255	98,874
1901	.....	.....
1913	.....	14,207
1914	.....	106,041
1915	.....	84,764
1916	.....	81,289
1917	.....	23,713
1918	.....	5,367
1919	333,704	40,349
1920	5,006*	986
1921	31,867	2,750
1922	120,713	5,429
1923	2,634	778
1924	50	102
1925	.....	.....
1926	29	7
1927	.....	.....

Guanc

	Tons.	Dollars
1871	94,345	3,313,914
1881	23,452	339,552
1891	11,162	194,167
1901	3,122	23,762
1913	16,462	313,891
1914	21,853	754,727
1915	20,950	534,371
1916	15,732	425,210
1917	3,563	73,394
1918	10,663	308,268
1919	8,218	296,425
1920	18,796	1,550,008
1921	37,578	3,158,064
1922	1,305	48,675
1923	22,883	912,240
1924	22,940	869,304
1925	24,353	737,896
1926	17,835	602,124
1927	20,579	834,447

Guiacol and Derivatives

	Pounds.	Dollars.
1914	1,637	2,645
1915	6,907	11,125
1916	469	1,160
1917	200	6,458
1918	9,492	74,818
1919	2,063	40,407
1920	2,870	18,479
1921	3,465	12,951
1922	3,203	8,249
1923	5,906	12,863
1924	2,285	5,678
1925	6,087	9,247
1926	2,193	4,683
1927	43,229	37,303

Gum, Amber and Amberoid, Crude

	Pounds.	Dollars.
1871	.....	180
1881	.....	42,400
1891	13,832	46,691
1901	16,947	119,405
1913	35,646	339,984
1914	22,485	117,375
1915	9,856	108,136
1916	443	3,590
1917	36	324
1918	734	1,280
1919	69	731
1920	3,406	12,086
1921	13,068	42,670
1922	4,164	24,789
1923	2,352	28,108
1924	2,246	25,144
1925	3,201	26,061
1926	3,173	25,786
1927	2,890	19,879

Gum, Arabic

	Pounds.	Dollars.
1871	12,317,518	1,700,249
1881	3,484,288	389,420
1891	986,760	124,235
1901	2,315,674	241,661
1912	6,586,787	568,631
1913	7,111,754	593,126
1914	2,727,447	182,870

Included in "Arabic or Senegal" after October 3, 1913.

Gum, Arabic or Senegal (Acacia)

	Pounds.	Dollars.
1914	3,492,682	240,066
1915	5,184,265	402,507
1916	7,617,494	679,928
1917	7,473,234	881,346
1918	6,033,341	1,242,281
1919	7,054,939	1,078,864
1920	6,926,635	881,780
1921	5,788,516	614,656
1922	8,894,748	718,553
1923	10,837,751	1,305,346
1924	6,627,005	759,653
1925	7,395,448	758,975
1926	8,552,260	901,092
1927	9,607,031	868,041

Gum, Asafetida

	Pounds.	Dollars.
1871	90,130	12,789
1881	135,175	12,318
1891	3,424	261
1901	160,998	25,598
1913	134,579	55,868
1914	106,338	27,193
1915	51,727	12,656
1916	115,856	30,126
1917	107,486	52,877
1918	57,398	44,741
1919	48,119	71,261
1920	96,380	211,734
1921	102,008	271,807
1922	5,548	1,405
1923	100,198	30,684
1924	26,494	7,137
1925	31,653	8,427
1926	69,548	14,236
1927	76,493	16,123

Gum, Benzoin, Gamboge and Mastic

	Pounds.	Dollars.
1901	23,207	6,418
1913	105,967	41,981
1914	41,975	17,386
1915	106,506	42,940
1916	219,266	73,843
1917	170,950	68,305
1918	136,120	70,501

Mastic shown separately after 1917; Benzoin and Gamboge after 1918.

Gum, Benzoin

	Pounds.	Dollars.
1871	1,631	544
*1881	.....	.....
1891	42,144	16,712
1913	13,265	7,630
1920	18,948	8,068
1921	34,055	9,382
1922	15 323	7,032
1923	72,282	29,150
1924	29,270	15,596
1925	27,893	10,485
1926	58,691	15,625
1927	153,579	61,576

* See Copal, Kauri and Dammar.

Gum, Camphor, Crude, Natural

	Pounds.	Dollars.
1871	624,258	92,345
1881	2,055,165	350,503
1891	1,666,074	468,025
1901	2,175,874	738,929
1913	3,477,760	979,355
1914	3,476,908	929,725
1915	3,715,387	998,555
1916	4,674,530	1,268,283
1917	6,605,630	1,991,406
1918	3,638,384	1,451,050
1919	2,622,792	1,189,768
1920	3,961,252	5,496,098
1921	2,045,273	1,847,572
1922	1,667,278	1,087,243
1923	3,477,034	2,213,226
1924	2,137,560	1,300,702
1925	1,905,224	1,012,907
1926	2,616,263	1,503,015
1927	2,041,928	1,054,297

Gum, Camphor, Refined, Natural

	Pounds.	Dollars.
1871	1,974	559
1881	134	36
1891	63	21
1901	77,313	39,507
1913	463,410	153,020
1914	624,508	201,992
1915	1,140,783	406,587
1916	2,304,197	754,498
1917	4,533,918	2,063,177
1918	1,145,244	800,318
1919	1,497,159	1,889,482
1920	1,367,263	2,843,755
1921	801,529	1,150,006
1922	1,596,757	1,196,809
1923	2,176,687	2,285,812
1924	2,659,071	1,874,509
1925	1,728,367	1,013,963
1926	1,193,641	778,471
1927	1,289,118	815,057

Gum, Camphor, Synthetic

	Pounds.	Dollars.
1915	16	3
1916	.....	.....
1917	469	174
1918	.....	.....
1919	.....	.....
1920	116,100	229,238
1921	123,686	28,060
1922	.....	.....
1923	293,933	182,494
1924	460,734	276,509
1925	1,347,208	682,329
1926	2,396,082	1,277,901
1927	2,759,027	1,337,850

Gum, Chicle

	Pounds.	Dollars.
1911	5,368,566	2,551,344
1912	5,266,285	2,433,924
1913	6,920,416	3,059,116
1914	7,998,187	2,902,454

Stated separately after 1914.

Gum, Chicle, Crude

	Pounds.	Dollars.
1901	1,756,057	380,410
1914	1,080,685	389,717
1915	2,465,400	839,512
1916	2,728,159	915,817
1917	4,435,149	1,467,917
1918	4,580,501	2,076,148
1919	6,583,276	3,660,679
1920	6,959,169	4,838,836
1921	6,808,317	4,391,872
1922	7,015,797	3,836,141
1923	7,451,716	4,017,354
1924	9,513,793	4,861,453
1925	9,440,701	5,760,671
1926	9,631,051	4,744,386
1927	7,985,369	4,130,436

Gum, Chicle, Refined

	Pounds.	Dollars.
1914	472,766	214,257
1915	1,934,760	962,889
1916	2,302,186	1,283,809
1917	3,935,093	2,371,834
1918	2,028,367	1,473,992
1919	529,166	564,270
1920	448,219	550,828
1921	162,895	249,973
1922	4,464	6,808
1923	15,615	16,931
1924	580	169
1925	140	79
1926	93	85
1927	.....	.....

Gum, Copal, Kauri and Dammar

	Pounds.	Dollars.
1871	1,466,750	186,993
†1881	15,140,050	2,343,736
1891	15,245,524	1,637,677
1901	18,325,248	1,944,056
1912	24,824,399	2,017,737
1913	31,513,330	2,828,840
1914	9,207,797	989,808

† 1881 includes Benzoin, Gamboge, Mastic and Sheilac.

Stated separately after 1914.

Gum, Copal and Other Varnish Gums, N. E. S.

	Pounds.	Dollars.
1914	13,005,925	988,002
1915	12,528,887	813,985
1916	24,100,156	1,440,238
1917	25,621,685	1,583,070
1918	16,590,809	1,147,004
1919	18,921,007	4,001,022
1920	26,417,439	2,614,072
1921	32,188,183	4,145,167
1922	15,090,828	1,124,758
1923	32,133,896	2,267,282
1924	23,422,723	1,820,861
1925	22,025,959	1,705,808
1926	33,294,915	2,786,582
1927	37,631,207	2,968,214

Gum, Dammar

	Pounds.	Dollars.
1914	3,854,698	337,245
1915	5,388,644	563,056
1916	10,819,590	790,776
1917	9,200,064	797,115
1918	5,942,536	689,308
1919	4,270,960	528,458
1920	9,637,983	1,548,604
1921	5,710,548	1,249,864
1922	5,478,880	620,599
1923	12,479,672	1,687,050
1924	8,746,290	1,099,997
1925	12,103,826	1,416,907
1926	13,415,772	1,775,201
1927	15,196,318	2,354,891

Gum, Dextrin, Etc.

	Pounds.	Dollars.
1871	.....	10,072
1881	849,892	49,982
1891	6,228,352	212,988
1901	5,602,395	164,120
1913	5,096,891	180,296
1914	6,684,556	213,301

Not stated as such after 1914.

Gum, Dextrin, Dextrin Substitutes, Burnt Starch or British Gum

	Pounds.	Dollars.
1914	471,491	18,180
1915	274,668	12,028
1916	154,882	10,049
1917	32,773	2,855
1918	505	50
1919	.....	.....
1920	77,238	6,764
1921	238,767	13,954
1922	302,022	15,932
1923	137,158	6,018
1924	110,537	4,161
1925	49,282	2,277
1926	97,632	3,451
1927	7,405	797

Gum, Dragon's Blood

	Pounds.	Dollars.
1871	.....	1,371
1881	.....	2,977
1891	2,088	541
1901	22,678	9,190
1913	14,553	5,916
1914	26,283	9,407
1915	23,110	8,446
1916	20,218	10,602
1917	48,026	10,137
1918	10,387	6,193
1919	24,064	10,121
1920	20,827	16,274
1921	90,508	11,758
1922	9,477	4,334
1923	43,916	14,211
1924	40,022	20,798
1925	48,077	28,070
1926	26,212	13,451
1927	75,314	34,500

Gum, Fir or Canada

	Pounds.	Dollars.
1871	.....	3,227
1881	.....	.....
1891	34,318	6,858

Not stated after 1891.

Gum, Gambier or Terra Japonica

	Pounds.	Dollars.
1871	11,165,119	252,593
1881	38,629,547	1,688,394
1891	27,610,924	1,343,604
1901	26,811,197	824,444
1913	17,037,805	784,931
1914	16,449,663	625,855
1915	14,169,250	542,200
1916	12,602,251	888,985
1917	10,861,904	853,675
1918	8,956,082	953,000
1919	5,909,382	654,211
1920	10,207,013	852,663
1921	6,202,780	432,258
1922	9,817,593	391,482
1923	7,727,170	459,982
1924	4,740,030	378,013
1925	5,146,377	657,358
1926	3,369,282	377,199
1927	3,892,265	312,737

Gum, Gamboge

	Pounds.	Dollars.
1919	18,153	23,452
1920	470,739	117,560
1921	3,025	3,798
1922	4,904	4,893

Not stated after 1922.

Gum, Kadaya and Talka

	Pounds.	Dollars
1924	1,124,324	86,338
1925	1,104,785	80,777
1926	1,899,899	154,035
1927	2,361,370	242,260

Imports Into the United States

Gum, Kauri

	Pounds.	Dollars
1914	6,554,887	1,097,989
1915	9,530,267	1,444,315
1916	9,958,953	1,394,527
1917	6,667,474	1,018,582
1918	5,867,216	1,029,036
1919	4,703,810	713,001
1920	8,424,661	1,152,075
1921	6,718,182	1,197,262
1922	6,623,811	1,221,442
1923	9,999,534	2,188,144
1924	7,712,927	1,518,668
1925	5,205,842	944,453
1926	4,574,920	832,011
1927	4,377,797	725,343

Gum, Lac, Crude, Seed, Button and Stick

	Pounds.	Dollars.
1871	73,758	10,647
1881	194,709	52,769
1891	796,757	127,547
1901	57,992	7,382
1913	293,010	36,832
1914	992,425	143,222
1915	1,126,167	88,293
1916	3,485,975	291,176
1917	5,473,174	637,846
1918	1,715,791	312,584
1919	833,784	188,220
1920	2,424,936	728,417
1921	1,806,726	646,407
1922	1,805,298	241,536
1923	6,581,125	1,471,459
1924	4,357,336	1,460,848
1925	9,596,083	3,584,986
1926	10,242,717	3,162,098
1927	15,183,906	4,055,389

Gum, Mastic

	Pounds.	Dollars.
1918	63,545	9,075
1919	10,281	4,232
1920	20,796	12,399
1921	10,954	5,391
1922	42,895	16,206
1923	32,011	11,819
1924	32,919	15,407
1925	28,591	13,860
1926	33,888	14,832
1927	47,235	22,243

Gum, Myrrh

	Pounds.	Dollars.
1924	33,128	6,673
1925	16,408	3,485
1926	80,898	9,830
1927	26,821	4,228

Gum, Rosin, Crude

	Pounds.	Dollars.
1913	299,983	12,605
1914	2,742,083	58,684
1915	1,505,790	42,085
1916	5,571,325	146,250
1917	129,848	3,380
1918	54,334	2,840
1919	251,853	11,064
1920	141,935	7,223
1921	1,908	126
1922	29,943	1,164
1923	494,480	20,455
1924	591,512	21,801
1925	841,068	33,361
1926	13,027,148	689,984
1927	6,376,568	176,842

Gum, Sandarac

	Pounds.	Dollars.
1924	147,230	29,151
1925	92,310	28,354
1926	148,214	46,554
1927	183,797	38,538

Gum, Senegal

	Pounds.	Dollars.
1901	1,107,763	130,959
1913	172,528	16,254
*1914	140,097	10,809

*Included in "Arabic or Senegal" after October 3, 1913.

Gum, Shellac

	Pounds.	Dollars.
1871	423,537	70,757
*1881	.....	.....
1891	6,290,225	1,078,584
1901	9,617,593	1,278,297
1913	22,069,610	3,046,750
1914	16,824,130	2,686,480
1915	24,308,145	3,018,296
1916	25,927,553	3,301,378
1917	32,847,434	7,709,228
1918	22,841,360	9,514,651
1919	14,268,653	6,462,754
1920	34,151,209	22,178,484
1921	23,871,866	16,634,073
1922	30,767,666	15,656,900
1923	32,775,176	20,084,540
1924	28,511,576	15,170,791
1925	21,436,333	11,433,671
1926	26,187,531	11,493,573
1927	28,706,090	8,846,496

* See Copal, Kauri and Dammar.

Gum, Spruce

	Pounds.	Dollars.
1918	274	294
1919	509	438
1920	789	752
1921	1,397	2,519
1922	2,664	4,059
1923	58	77
1924	3,581	646
1925	9,202	4,140
1926	1,971	1,478
1927	2,510	1,007

Gum, Tragacanth

	Pounds.	Dollars.
1881	315,918	127,312
1891	717,404	211,183
1901	1,071,307	305,737
1913	1,401,721	483,300
1914	1,301,545	460,364
1915	1,025,081	355,119
1916	1,129,704	590,123
1917	473,556	320,751
1918	525,445	279,284
1919	785,725	909,652
1920	1,519,386	1,788,079
1921	324,619	484,605
1922	665,817	398,786
1923	1,202,902	596,307
1924	917,985	354,257
1925	696,856	261,922
1926	1,422,559	720,104
1927	1,459,300	740,541

Gum, Tragasol

	Pounds.	Dollars.
1913	1,028,804	23,906
1914	913,077	20,310
1915	761,390	16,293
1916	931,503	21,587
1917	852,914	21,663
1918	503,045	22,247
1919	662,762	40,006
1920	567,550	27,406
1921	606,184	21,766
1922	734,295	26,720
1923	1,095,765	43,705
1924	798,477	38,499
1925	1,207,853	47,880
1926	975,356	49,284
1927	1,235,474	47,040

Gums and Resins, in a Crude State, Not Elsewhere Shown

	Pounds.	Dollars.
1881	.....	244,577
1891	.....	1,621,530
1901	.....	87,537
1913	2,704,615	216,886
1914	3,733,839	239,824
1915	4,088,233	255,469
1916	4,963,037	258,837
1917	3,126,764	248,700
1918	5,273,222	625,960
1919	3,252,094	630,683
1920	6,866,439	1,093,332
1921	6,183,215	670,635
1922	7,505,216	532,226
1923	6,751,977	868,575
1924	4,853,932	496,519
1925	5,878,775	633,130
1926	7,611,090	777,545
1927	4,916,059	616,372

Hellebore

	Pounds.	Dollars.
1924	152,925	9,889
1925	30,776	1,336
1926	29,929	1,361
1927	73,177	3,119

Hemlock Bark Extract for Tanning,

	Pounds.	Dollars.
1871	.....	3,256
1881	.....	4,021
1891	768,710	14,958
*1901	3,424,390	101,840
1915	5,263,206	173,998
1916	5,577,989	390,287
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	117,113	4,712
1922	320,509	12,194
1923	79,145	2,887
1924	.....	.....
1925	.....	.....
1926	100	23
1927	.....	.....

*1901 includes "Quebracho extract."

Henbane

	Pounds.	Dollars.
1924	77,922	13,272
1925	72,746	11,123
1926	101,006	12,164
1927	114,881	10,744

Hexamethylenetetramine

	Pounds.	Dollars.
1925	10,549	7,036
1926	21,763	9,261
1927	14,661	6,557

Honey

	*Pounds.	Dollars
1871	85,358	53,120
1881	51,158	29,542
1891	21,392	9,570
1901	129,136	58,688
1913	113,792	64,718
1914	49,163	30,291
1915	268,912	107,172
1916	124,268	55,592
1917	277,345	171,616
1918	159,339	213,006
1919	99,657	151,102
1920	764,244	1,019,250
1921	388,262	469,037
1922	187,441	107,740
1923	70,235	61,547
1924	272,389	31,042
1925	263,845	32,073
1926	166,260	33,529
1927	169,452	34,361

* Quantity stated in gallons prior to 1924.

Hoofs, Horns, Horn Strips, and Tips

	Pounds.	Dollars.
1871	.....	15,264
1881	.....	398,211
1891	.....	587,643
1901	.....	311,924
1913	.....	320,192
1914	.....	254,872
1915	.....	156,126
1916	.....	110,169
1917	.....	171,718
1918	.....	357,399
1919	1,928,384	106,179
1920	4,894,749	292,353
1921	9,424,775	412,931
1922	2,158,131	140,782
1923	4,373,049	334,903
1924	3,087,550	241,161
1925	1,368,649	141,761
1926	1,120,177	98,697
1927	919,209	74,593

Hop Extract and Lupulin

		Dollars
1901	.....	2,893
1913	.....	34,338
1914	.....	49,451
1915	.....	24,407
1916	.....	3,805
1917	.....	1,750
1918	.....	174
1919	.....	19
1920	.....	20,503
1921	.....	17,690
1922	.....	6,892
1923	.....	4,922

"Hop Extract" not stated after 1923. See "Lupulin."

Hoarhound

	Pounds.	Dollars.
1924	94,886	5,508
1925	34,290	1,972
1926	58,068	3,233
1927	78,477	3,394

Hops

	Pounds.	Dollars.
1871	100,884	12,811
1881	475,428	111,906
1891	3,789,264	1,706,824
1901	2,489,009	827,943
1913	8,471,776	2,843,299
1914	5,360,748	2,775,882
1915	11,710,534	2,788,644
1916	664,284	147,638
1917	212,029	54,701
1918	112,811	61,201
1919	6	14
1920	1,866,641	1,078,558
1921	3,714,536	2,073,574
1922	822,291	343,658
1923	1,266,303	254,862
1924	558,698	183,794
1925	435,129	189,597
1926	449,027	256,492
1927	427,040	280,448

Hydrogen Peroxide or Dioxide

	Pounds.	Dollars.
1927	748,184	130,070

Hyoscyamine and Its Salts

	Ounces.	Dollars.
1924	28	458
1925	.....	.....

Not stated after 1925.

Ichthyol

	Pounds	Dollars.
1901	23,619	33,421
1913	44,347	61,796
1914	66,957	92,485
1915	51,847	70,664
1916	69,227	59,470
1917	91,884	60,757
1918	65,982	43,541
1919	19,623	9,830
1920	98,870	91,927
1921	54,309	31,616
1922	107,119	140,314
1923	17,763	20,407
1924	20	15
1925	9,520	17,157
1926	21,866	23,464
1927	37,609	51,062

Incense

	Pounds.	Dollars.
1901	.....	702
1913	.....	14,637
1914	.....	24,382
1915	.....	4,328
1916	.....	5,431
1917	.....	9,968
1918	.....	12,951
1919	.....	32,446
1920	.....	84,877
1921	.....	102,850
1922	.....	62,040
1923	.....	80,139
1924	262,589	100,636
1925	318,040	199,953
1926	247,017	86,015
1927	273,783	72,840

India Rubber and Substitutes for, Crude—Balata

	Pounds.	Dollars.
1901	7,635	1,987
1913	1,818,598	706,772
1914	1,525,351	789,261
1915	2,473,228	963,384
1916	2,549,303	997,827
1917	3,284,533	1,647,906
1918	2,468,403	1,285,869
1919	1,238,852	593,633
1920	2,013,737	1,278,551
1920	1,979,990	1,043,567
1922	1,867,477	1,063,056
1923	1,755,857	979,860
1924	1,334,510	731,691
1925	873,078	446,629
1926	1,195,374	579,412
1927	1,009,976	404,496

India Rubber and Substitutes for, Crude—Guayule Gum

	Pounds.	Dollars.
1913	10,504,945	4,354,400
1914	1,475,804	607,076
1915	5,116,165	1,442,464
1916	2,826,960	881,028
1917	2,872,372	764,484
1918	3,242,340	1,037,090
1919	2,990,253	761,060
1920	1,814,913	278,175
1920	995,123	197,059
1922	286,200	57,040
1923	1,055,459	226,043
1924	2,784,864	740,029
1925	5,148,958	920,391
1926	10,670,951	2,756,136
1927	9,652,227	2,347,169

India Rubber and Substitutes for, Crude—Jelutong, or Pontianak

	Pounds.	Dollars.
1901	9,435,740	257,322
1913	45,444,282	2,197,948
1914	24,224,955	1,175,335
1915	14,765,765	704,618
1916	28,381,105	1,347,176
1917	23,738,004	1,058,577
1918	16,109,009	969,144
1919	11,368,283	1,199,216
1920	18,402,162	2,432,893
1921	6,774,180	1,075,771
1922	5,782,265	453,248
1923	8,712,813	702,485
1924	11,076,841	1,015,531
1925	14,394,748	1,380,198
1926	15,141,782	2,331,553
1927	16,792,248	2,925,063

India Rubber, Milk of, or Latex

	Pounds.	Dollars.
1925	6,887,869	1,647,611
1926	9,400,462	6,130,366
1927	3,538,312	1,495,663

Indigo, Carmined

	Pounds.	Dollars.
1881	.....	329
1891	28,175	33,145
1901	11,981	9,789
1912	9,047	5,903
1913	16,329	9,986
1914	2,130	1,383

Not stated after October 3, 1913.

Indigo, Crude, Natural or Synthetic

	Pounds.	Dollars.
1913	7,712,488	1,102,893
1914	8,252,528	1,115,128
1915	7,983,112	1,604,767
1916	6,794,518	8,451,501
1917	*545,105	960,068

* Figures cover period July 1 to September 8. 1916; stated separately afterward

Indigo, Natural

	Pounds.	Dollars.
1871	2,101,867	2,115,914
1881	1,699,754	1,541,664
1891	3,999,644	1,692,299
1901	3,139,063	1,402,894
1917	1,231,986	2,449,361
1918	2,141,382	3,261,978
1919	794,251	961,610
1920	154,843	206,119
1921	61,967	121,820
1922	36,007	76,176
1923	10,527	11,709
1924	10,244	4,715
1925	4,077	4,830
1926	.....	.....
1927	2,148	1,373

Indigo, Synthetic

	Pounds.	Dollars.
1917	886,700	559,156
1918	942,946	553,246
1919	358,867	197,176
1920	520,347	351,440
1921	99,809	107,084
1922	101,683	157,925
1923	27,750	35,200
1924	356	117
1925	2,116	948
1926	1,589	280
1927	590	610

Indigo Colors, Dyes, Color Acids, Etc.

	Pounds.	Dollars.
1924	4,988	6,228
1925	4,777	4,296
1926	14,423	22,599
1927	8,220	9,786

Indigo Dyes

		Dollars.
1914	.....	34,342
1915	.....	76,258
1916	.....	155,254
1917	.....	147,744

Stated as "Indigoids, etc." after 1917.

Indigo Extracts or Pastes

	Pounds.	Dollars.
1871	.....	40,423
1881	1,540,185	141,163
1891	881,969	58,289
1901	181,168	12,292
1912	223,687	45,984
1913	242,998	43,417
1914	11,998	2,540

Not stated after October 3, 1913.

Indigoids Obtained from Indigo or Otherwise

	Pounds.	Dollars.
1918	13,037	40,984
1919	4,236	9,378
1920	70,461	177,736
1921	67,269	110,596
1922	187,156	228,822
1923	64,399	111,270

Stated as "Indigo colors, dyes, etc.," after 1923.

Ink Powder (Coal Tar Product)

	Pounds.	Dollars.
1924	98	72
1925	.....	.....
1926	100	172
1927	30	8

Ink, Printers' and Lithographic

	Pounds.	Dollars.
1901	.....	13,392
1913	.....	7,820
1914	.....	24,999
1915	.....	15,022
1916	.....	17,884
1917	.....	19,028
1918	.....	4,685
1919	.....	655
1920	.....	7,214
1921	.....	12,319
1922	.....	4,997
1923	.....	14,403
1924	13,463	6,960
1925	96,291	21,656
1926	37,282	12,001
1927	61,410	16,273

Ink, Writing and Copying

	Pounds.	Dollars.
1913	.....	28,518
1914	.....	18,941
1915	.....	22,765
1916	.....	21,931
1917	.....	26,400
1918	.....	11,962
1919	.....	15,615
1920	.....	14,846
1921	.....	10,594
1922	.....	7,424
1923	.....	6,087
1924	35,139	7,634
1925	19,547	3,457
1926	31,435	6,063
1927	24,121	5,347

Ink, All Other, Including Ink Powders (Except Coal Tar)

	Pounds.	Dollars.
1871	.....	85,823
1881	.....	151,358
1891	.....	116,354
1901	.....	61,653
1913	.....	4,918
1914	.....	6,931
1915	.....	6,196
1916	.....	3,481
1917	.....	5,095
1918	.....	8,529
1919	.....	7,129
1920	.....	8,400
1921	.....	14,875
1922	.....	7,226
1923	.....	11,934
1924	77,930	22,431
1925	94,860	174,102
1926	72,650	19,118
1927	56,853	17,193

Iodine, Crude

	Pounds.	Dollars.
1871	74,320	212,195
1881	162,863	336,998
1891	241,186	382,009
1901	262,052	658,492
1913	351,256	739,734
1914	230,391	533,447
1915	631,510	1,284,395
1916	1,044,526	2,447,764
1917	1,726,903	4,381,317
1918	253,231	536,799
1919	1,212,290	2,443,569
1920	520,443	927,269
1921	592,758	1,201,669
1922	384,141	988,953
1923	342,206	1,067,491
1924	55,974	137,806
1925	.....	.....
1926	651,097	2,236,937
1927	706,560	2,240,291

Imports Into the United States

Iodine, Resublimed

	Pounds.	Dollars.
1871	956	3,499
1881	13	30
1891	35	106
1901	22	21
1913	49	96
1914	57	205
1915	3	7
1916	.....	.....
1917	2,640	9,088
1918	15,450	41,739
1919	6,523	22,657
1920	2,870	10,160
1921	2,300	8,051
1922	1,500	4,730
1923	24	45
1924	.....	.....
1925	.....	.....
1926	1	6
1927	.....	.....

Iodoform

	Pounds.	Dollars.
1901	21	93
1913	16	57
1914	864	301
1915	70	40
1916	.....	.....
1917	.....	.....
1918	1	4
1919	.....	.....
1920	.....	.....
1921	7	27
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....

Not stated after 1925.

Ipecac

	Pounds.	Dollars.
1871	22,460	25,232
1881	39,385	41,372
1891	30,484	50,505
1901	52,143	112,405
1913	54,648	86,113
1914	78,654	110,316
1915	137,927	248,408
1916	203,734	484,828
1917	84,672	146,505
1918	60,972	122,281
1919	171,944	378,542
1920	94,429	211,831
1921	83,316	186,998
1922	40,854	44,377
1923	65,875	81,625
1924	78,200	106,117
1025	75,145	113,440
1926	43,238	103,374
1927	99,408	295,572

Iridium

	Ounces, troy.	Dollars.
1881	.....	1,730
1891	.....	333
1901	.....	6,072
1913	5,341	348,333
1914	2,185	154,842
1915	3,801	220,823
1916	2,496	146,055
1917	3,899	355,206
1918	2,815	307,954
1919	3,678	503,047
1920	4,960	846,462
1921	3,282	641,349
1922	780	74,188
1923	1,812	336,843
1924	1,685	282,863
1925	1,517	255,710
1926	2,868	609,199
1927	4,875	569,217

Iron Alum

	Pounds.	Dollars.
1927	661	55

Iron Sulphide

	Pounds.	Dollars.
1924	2,618	457
1925	16,412	926
1926	23,567	1,566
1927	17,842	602

Isinglass and Prepared Fish Sounds

	Pounds.	Dollars.
1871	.....	6,449
1881	333,901	243,239
1891	18,222	17,976
1901	5,608	12,341
1913	225,165	72,540
1914	146,364	56,433
1915	11,906	9,008
1916	13,750	14,498
1917	35,723	35,476
1918	31,490	23,339
1919	16,764	11,806
1920	26,844	20,341
1921	20,972	15,515
1922	15,278	12,416
1923	79,688	76,261

See "Casein Glue, Isinglass and Other Fish Sounds, Prepared," after 1923.

Jaborandi

	Pounds.	Dollars.
1924	7,354	617
1925	.....	.....
1926	.....	.....
1927	2,956	247

Jalap

	Pounds.	Dollars.
1871	46,135	29,688
1881	76,986	12,256
1891	92,107	24,141
1901	165,850	15,593
1913	227,275	44,632
1914	208,901	23,942
1915	176,047	18,485
1916	201,383	13,642
1917	168,639	14,315
1918	126,511	34,238
1919	95,103	40,667
1920	193,813	104,902
1921	62,148	22,290
1922	80,474	7,207
1923	131,727	23,376
1924	127,665	37,290
1925	122,851	34,476
1926	101,422	24,236
1927	157,883	30,478

Joss Sticks, or Joss Light

		Dollars.
1891	.....	1,307
1901	.....	9,706
1913	.....	13,851
1914	.....	6,888
1915	.....	21,720
1916	.....	36,968
1917	.....	36,115
1918	.....	30,660
1919	.....	26,906
1920	.....	36,137
1921	.....	25,056
1922	.....	46,986
1923	.....	39,782
1924	.....	31,517
1925	.....	32,620
1926	.....	25,264
1927	.....	22,713

Kainit

	Tons.	Dollars.
1891	85,877	605,309
1901	187,470	1,235,124
1913	366,184	2,149,089
1914	526,112	2,579,619
1915	79,124	444,995
1916	64	1,795
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	272,048	5,599,980
1921	204,834	4,782,974
1922	83,571	585,338
1923	178,358	1,133,576
1924	181,287	1,080,132
1925	144,642	865,201
1926	190,955	1,252,942
1927	147,203	1,058,858

Kelp

	Pounds.	Dollars.
1901	.....	13
1913	.....	4
1914	.....	350
1915	.....	.....
1916	.....	67
1917	.....	50
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	36
1922	.....	.....
1923	2,500	275
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Kieserite

	Pounds.	Dollars.
1924	3,369,034	12,387
1925	1,336,679	4,562
1926	201,027	1,039
1927	1,000,945	4,610

Lac Dye

	Pounds.	Dollars.
1871	128,938	21,060
1881	194,623	59,004
1891	.....	.....
1901	4,922	671
1913	.....	.....
1914	.....	.....
1915	.....	.....
1916	89,000	13,804
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	398,028	54,849
1921	680	135
1922	.....	.....

Not stated after 1922.

Lactarene

(See Casein)

Lakes From Coal Tar

	Pounds.	Dollars.
1926	800	811
1927	500	835

Lakes, Dry or in Pulp, Not Specially Provided For

	Pounds.	Dollars.
1914	.....	59,603
1915	.....	153,430
1916	.....	29,839
1917	.....	11,230
1918	.....	8,301
1919	600	1,307
1920	8,901	7,870
1921	9,798	6,533
1922	169,895	9,234
1923	6,091	7,322
1924	3,016	2,833
1925	263	760

Not stated after 1925.

Lamp Black

	Pounds.	Dollars.
1924	751,396	59,436
1925	836,629	54,984
1926	1,120,160	74,627
1927	412,304	28,796

Lard

	Pounds.	Dollars.
1871	9,565	1,478
1881	1,655	225
1891	1,795	187
1901	3,094	290
1913	4,117	496
1914	1,251	169
1924	11,406	1,707
1925	41,433	3,198
1926	3,519	591
*1927	84,197	9,401

Included in next class 1915 to 1923 incl.

* Including 79,361 pounds ($8,600) from the Philippines.

Lard Compounds and Lard Substitutes

	Pounds.	Dollars.
1914	124,385	13,665
1915	729,792	79,632
1916	2,405	289
1917	66,682	7,522
1918	1,131,998	266,806
1919	3,191,726	870,361
1920	746,073	192,918
1921	4,988	1,146
1922	3,263	497
1923	3,443	912
1924	5,221	837
1925	104,642	13,364
1926	5,516	887
*1927	371,837	43,581

* Including 367,945 pounds ($42,965) from the Philippines.

Lavender Flowers

	Pounds.	Dollars.
1924	52,090	16,556
1925	21,003	4,622
1926	32,161	7,236
1927	52,462	13,933

Lead Acetate, Brown, Gray or Yellow

	Pounds.	Dollars.
1871	1,827	196
1891	.....	.....
1901	11	4
1913	42	8
1914	17,477	957
1915	.....	.....
1916	124	17
1917	225	97
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	3,854	306
1922	5,123	346
1923	11,023	768
1924	44,299	3,456
1925	11,038	896
1926	11,365	863
1927	16,928	1,340

Lead Acetate, White

	Pounds.	Dollars.
1881	34	5
1891	13,279	707
1901	1,500	99
1913	21,599	1,177
1914	110,936	10,768
1915	31,096	1,809
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	220	212
1920	14	7
1921	6,361	549
1922	83,712	6,378
1923	70,297	5,010
1924	153,307	12,798
1925	163,142	15,995
1926	163,707	14,983
1927	306,987	29,390

Lead Arsenate

	Pounds.	Dollars.
1924	3,611	534
1925	310	26
1926	10,157	1,488
1927	.....	.....

Lead Nitrate

	Pounds.	Dollars.
1871	513,280	35,358
1881	179,261	10,651
1891	639	46
1901	24,260	1,231
1913	11,305	605
1914	11,312	712
1915	.....	.....
1916	2,205	280
1917	224	22
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	7,746	530
1923	89,073	4,614
1924	11,334	914
1925	28,532	2,440
1926	41,489	3,481
1927	92,220	9,607

Lead Compounds, Not Elsewhere Specified

	Pounds.	Dollars.
1914	102,899	9,348
1915	86,514	7,471
1916	39,823	3,644
1917	32,887	3,069
1918	4,510	242
1919	2,408	321
1920	5,591	958
1921	13,224	2,102
1922	3,481	683
1923	14,013	1,951
1924	26,978	3,412
1925	25,489	2,826
1926	19,907	2,998
1927	70,274	9,812

Lead Pigments, N. E. S.

	Pounds.	Dollars.
1921	35,227	2,909
1923	1,489	467
1923	14,050	1,099
1924	27,615	3,883
1925	1,458	312
1926	23,719	3,460
1927	30,826	2,155

Lead, Pigs and Bars, Old Refuse Run Into Bars, Etc.

	Pounds.	Dollars.
1871	91,496,716	3,721,096
1881	4,322,068	159,129
1891	19,772,642	615,716
1901	.....	.....
1913	6,905,760	147,838
1914	1,309,204	36,307
1915	951,999	31,385
1916	1,794,889	90,815
1917	6,869,189	328,951
1918	345,861	16,155
1919	2,313,662	108,837
1920	15,242,621	735,608
1921	112,785,058	5,145,452
1922	13,085,648	586,894
1923	64,012,593	2,443,146
1924	27,951,672	1,896,642
1925	13,355,676	802,771

Not stated after 1925.

Lead Pigs and Bars

	Pounds.	Dollars.
1926	14,858,383	1,063,331
1927	23,218,768	1,659,590

Lead Resinate

	Pounds.	Dollars.
1925	220	25
1926	.....	.....
1927	840	192

Lead, Sublimed, Basic Sulphate

	Pounds.	Dollars.
1926	266	30
1927	11,000	583

Leeches

	Number.	Dollars.
1891	.....	3,647
1901	.....	2,464
1913	.....	5,587
1914	.....	7,376
1915	.....	1,834
1916	.....	2,810
1917	.....	16,899
1918	.....	9,035
1919	.....	5,818
1920	.....	14,130
1921	.....	11,100
1922	.....	7,692
1923	.....	7,704
1924	247,827	6,528
1925	464,370	5,386
1926	396,078	4,419
1927	364,000	5,400

Lemon, Lime and Sour Orange Juice

	*Gallons.	Dollars.
1871	.....	7,058
1881	.....	63,920
1891	.....	140,673
1901	.....	122,469
1913	.....	116,370
1914	.....	110,860
1915	.....	139,605
1916	.....	152,575
1917	.....	180,088
1918	.....	114,404
1919	1,933,465	277,031
1920	3,254,653	515,004
1921	1,009,320	165,827
1922	1,083,583	169,216
1923	1,534,682	176,662
1924	4,305,887	511,999
1925	3,668,362	533,479
1926	2,612,659	502,972
1927	445,296	470,967

* Quantity stated in pounds prior to 1927.

Licorice Extract in Paste, Rolls or Other Forms

	Pounds.	Dollars.
1871	2,685,536	310,901
1881	872,900	111,072
1891	1,190,524	150,090
1901	878,634	96,404
1913	832,277	106,288
1914	946,016	122,210
1915	1,080,718	152,756
1916	1,702,927	230,129
1917	1,156,300	253,671
1918	734,976	229,812
1919	413,648	213,028
1920	1,116,621	773,970
1921	1,653,809	519,884
1922	1,444,253	333,434
1923	1,570,930	400,364
1924	1,002,100	198,495
1925	1,886,859	291,791
1926	1,396,076	260,478
1927	960,506	207,739

Licorice Root

	Pounds.	Dollars.
1871	3,199,958	80,366
1881	29,927,501	675,720
1891	55,093,585	897,186
1901	96,118,444	1,737,709
1913	105,832,429	1,806,756
1914	86,754,245	1,526,057
1915	82,289,410	1,557,442
1916	52,784,042	1,792,573
1917	59,398,644	2,189,441
1918	27,051,021	1,863,886
1919	42,644,661	3,426,007
1920	47,582,849	2,983,716
1921	59,963,895	3,755,726
1922	52,437,947	2,157,916
1923	47,531,247	1,735,876
1924	86,867,065	2,891,142
1925	51,927,467	1,365,195
1926	57,548,736	1,562,846
1927	58,007,964	1,630,823

Lime N. E. S.

	*Pounds.	Dollars.
1871	.....	11,315
1881	.....	24,968
1891	329,580	67,700
1901	477,755	65,413
1913	77,819	42,839
1914	65,036	42,928
1915	66,634	29,518
1916	92,321	42,537
1917	160,776	74,487
1918	147,080	77,733
1919	167,152	103,749
1920	278,046	219,986
1921	361,553	357,992
1922	224,189	241,580
1923	266,747	352,651
1924	488,845	411,550
1925	25,128,561	249,369
1926	27,206,642	264,408
1927	29,258,180	283,439

* Stated in "100 pounds" prior to 1925. Includes "Hydrated" prior to 1924.

Lime, Chlorinated, or Bleaching Powder

	Pounds.	Dollars.
1871	32,111,839	635,910
1881	74,624,420	820,073
1891	111,136,006	1,412,470
1901	110,962,467	1,372,829
1913	76,002,327	619,492
1914	48,497,239	416,893
1915	18,402,130	197,975
1916	3,289,790	80,418
1917	65,564	3,888
1918	535	83
1919	839,596	11,363
1920	880,007	13,611
1921	4,584,344	144,029
1922	17,374,617	267,065
1923	1,759,457	61,943
1924	10,837,833	48,780
1925	1,776,305	58,742
1926	3,011,028	77,700
1927	3,251,882	60,317

Lime Citrate

	Pounds.	Dollars.
1891	28,358	4,337
1901	2,416,068	289,583
1913	5,526,954	766,309
1914	3,119,924	496,517
1915	6,242,244	1,102,629
1916	8,127,364	1,788,652
1917	6,361,458	1,554,577
1918	4,013,606	814,073
1919	2,773,095	1,136,057
1920	10,929,314	2,908,023
1921	5,060,407	1,104,576
1922	8,983,134	1,194,964
1923	7,572,925	1,103,584
1924	2,951,386	328,648
1925	1,984,741	211,289
1926	3,469,202	395,777
1927	1,755,948	190,202

Lime, Hydrated

	Pounds.	Dollars.
1924	6,115,000	56,712
1925	3,535,460	29,189
1926	5,918,294	48,895
1927	9,910,581	80,272

Litharge

	Pounds.	Dollars.
1871	70,889	3,870
1881	63,058	2,588
1891	87,970	4,334
1901	23,898	1,057
1913	34,022	1,649
1914	43,156	2,355
1915	14,779	774
1916	20,160	1,417
1917	220	42
1918	100	12
1919	.....	.....
1920	2	1
1921	21,100	2,653
1922	1,770	162
1923	21,405	1,250
1924	1,220	74
1925	4,040	496
1926	232	30
1927	402	54

Lithopone and Other Combinations of Zinc Sulphide and Barium Sulphate

	Pounds.	Dollars.
1914	7,245,151	218,133
1915	6,185,345	195,829
1916	5,122,083	414,573
1917	231,869	20,591
1918	448,000	29,199
1919	233,338	17,678
1920	2,284,955	170,522
1921	3,270,179	249,014
1922	20,482,320	822,045
1923	20,632,881	821,318
1924	19,099,722	739,452
1925	13,396,004	500,241
1926	15,069,761	537,802
1927	16,533,451	645,259

Imports Into the United States

Litmus

	Pounds.	Dollars.
1881	.....	229
1891	.....	113
1901	.....	84
1913	.....	216
1914	.....	263
1915	.....	59
1916	.....	280
1917	.....	648
1918	.....	44
1919	5,016	4,177
1920	2,054	1,585
1921	5,303	3,419
1922	2,396	1,756

Included in "Cudbear, etc.," after 1922.

Logwood

	Tons.	Dollars.
1881	72,018	1,302,983
1891	84,381	1,842,964
1901	54,480	857,991
1913	36,952	475,484
1914	30,172	379,754
1915	54,704	722,410
1916	134,819	3,437,388
1917	121,762	4,127,031
1918	55,354	1,175,049
1919	20,871	412,952
1920	45,073	1,144,455
1921	56,977	1,697,436
1922	31,418	644,812
1923	27,653	426,878
1924	31,330	590,285
1925	22,545	394,013
1926	21,387	422,541
1927	26,627	516,765

Logwood Extract

	Pounds.	Dollars.
1871	.....	12,537
1881	6,091,388	454,984
1891	3,282,227	376,803
1901	2,864,874	191,852
1913	2,258,206	111,575
1914	1,228,178	77,110
1915	2,061,368	144,207
1916	2,652,787	316,872
1917	1,147,448	164,711
1918	215,954	24,698
1919	265,774	51,041
1920	868,297	70,910
1921	116,185	25,500
1922	1,317,694	78,601
1923	1,928,359	97,086
1924	1,693,963	119,156
1925	2,264,162	177,038
1926	2,756,576	204,734
1927	354,495	41,964

Lupulin

	Pounds.	Dollars.
1924	7,589	12,357
1925	10,741	18,229
1926	14,479	41,735
1927	14,292	44,139

Lycopodium

	Pounds.	Dollars.
1924	18,267	4,971
1925	4,923	2,515
1926	35,606	24,903
1927	47,000	33,084

Mace, Unground

	Pounds.	Dollars.
1871	69,370	41,571
1881	86,914	30,111
1891	186,801	85,978
1901	321,146	78,785
1913	611,005	244,177
1914	287,976	112,178
1915	342,618	124,128
1916	426,096	130,796
1917	436,346	145,126
1918	371,746	118,168
1919	321,339	107,739
1920	552,040	184,357
1921	581,408	150,651
1922	734,025	131,543
1923	927,276	247,258
1924	761,825	297,995
1925	613,694	300,949
1926	690,075	440,411
1927	871,396	611,646

Mace, Bombay or Wild, Unground

	Pounds.	Dollars.
1915	5,714	771
1916	22,400	6,720
1917	40,984	4,099
1918	1,791	624
1919	.....	.....
1920	3,236	397
1921	1,986	249
1922	8,964	1,494
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	2,217	1,853
1927	.....	.....

Magnesia, Calcined or Oxide

	Pounds.	Dollars.
1871	24,874	7,861
1881	20,815	6,182
1891	7,157	1,658
1901	22,383	4,092
1913	72,579	12,592
1914	109,306	15,118
1915	145,806	16,012
1916	46,008	7,560
1917	56,656	17,578
1918	12,165	4,483
1919	572	1,318
1920	38,391	15,063
1921	17,664	6,900
1922	60,998	10,474
1923	144,597	24,857
1924	113,487	34,054
1925	135,827	34,715
1926	505,754	44,838
1927	218,935	50,725

Magnesia Carbonate, Precipitated

	Pounds.	Dollars.
1871	132,619	15,031
1881	350,140	35,232
1891	76,015	5,603
1901	13,897	894
1913	77,190	3,811
1914	58,683	3,972
1915	49,731	2,554
1916	19,888	1,414
1917	25,092	5,077
1918	5,681	1,906
1919	232	131
1920	19,112	2,311
1921	3,760	666
1922	26,888	2,998
1923	215,815	13,285
1924	1,108,429	57,630
1925	303,367	16,856
1926	236,655	15,953
1927	263,988	17,131

Magnesia Chloride, Anhydrous

	Pounds.	Dollars.
1919	18,676	1,907
1920	214,107	3,371
1921	2,022,339	25,535
1922	9,011,216	102,464
1923	19,270,756	196,085
1924	56,692	2,738
1925	135,500	1,785
1926	.....	.....
1927	.....	.....

Magnesia, Silicofluoride or Fluosilicate

	Pounds.	Dollars
1927	775,736	45,416

Magnesia Chloride, N. E. S.

	Pounds.	Dollars.
1924	20,818,688	117,223
1925	14,348,685	88,205
1926	14,333,772	97,930
1927	13,014,056	95,302

Magnesia Sulphate (Epsom Salt)

	Pounds.	Dollars.
1871	85,582	1,108
1881	17,410	293
1891	16,370	207
1901	266,290	1,682
1913	9,345,099	35,739
1914	13,550,599	48,742
1915	7,005,598	32,862
1916	1,456,254	8,503
1917	54,200	875
1918	48,540	915
1919	4,350	167
1920	662,896	8,925
1921	6,591,977	105,776
1922	16,180,525	119,951
1923	15,879,648	171,592
1924	9,650,302	54,047
1925	7,986,985	51,021
1926	8,330,786	48,070
1927	11,856,798	68,734

Magnesite, Crude

	Pounds.	Dollars.
1901	65,996,858	281,901
1913	33,654,260	111,276
1914	21,590,606	46,611
1915	37,463,509	80,625
1916	101,591,459	281,951
1917	179,292,638	748,951
1918	18,552,767	104,947
1919	1,975	57,434
1920	13,881	232,708
1921	50,927	450,872
1922	60,372	907,827
1923	35,427	430,568
1924	2,890,394	11,237
1925	23,795	559
1926	963,489	5,946
1927	1,365,618	8,255

Quantity stated in tons 1918-1923.

Magnesite, Caustic, Calcined

	Pounds.	Dollars.
1913	345,322,155	1,731,443
1914	288,989,577	1,485,273
1915	125,893,407	751,766
1916	32,372,610	282,768
1917	9,448,817	182,037
1918	22,764,029	535,202
1919	12,058	532,020
1920	13,619	365,623
1921	9,425	336,539
1922	16,340	442,259
1923	28,556	631,558
1924	28,761,792	366,645
1925	31,029,564	367,195
1926	32,482,377	371,218
1927	25,772,216	280,153

Quantity stated in tons 1918-1923.

Magnesite, Dead-Burned and Grain

	Pounds.	Dollars.
1924	98,118,821	809,760
1925	109,364,993	785,136
1926	122,878,186	897,838
1927	109,854,340	807,472

Magnesium, Metallic and Scrap

	Pounds.	Dollars.
1920	17,988	19,492
1921	43,297	34,123
1922	70,186	32,800
1923	135,622	37,591
1924	7,608	3,586
1925	1,501	785
1926	2,277	807
1927	7,385	2,105

Magnesium Powder

	Pounds.	Dollars.
1927	4,600	5,207

Malt Extract, Fluid and Malt Liquors

	Gallons.	Dollars
1923	905	895
1924	534	880
1925	289	522
1926	75	143
1927	1,645	2,252

Malt Extract, Fluid, in Bottles or Jugs

	Gallons.	Dollars.
1881	.....	1,036
1891	46,966	48,802
1901	1,757	1,908
1913	1,405	2,376
1914	1,284	2,087
1915	318	589
1916	64	92
1917	516	485
1918	.....	.....
1919	3	5
1920	.....	.....
1921	3,708	4,116
1922	2,079	3,340

Not stated after 1922.

Malt Extract, Fluid, in Casks

	Gallons.	Dollars.
1891	13,727	6,817
1901	8,244	4,382
1913	9,191	9,661
1914	10,333	10,050
1915	4,124	3,951
1916	2,488	2,313
1917	10,783	10,600
1918	.....	.....
1919	.....	.....
1920	20	51
1921	1,878	3,018
1922	70	113

Not stated after 1922.

Malt Extract, Solid or Condensed

	Pounds.	Dollars.
1891	.....	187
1901	.....	400
1913	.....	338
1914	.....	767
1915	.....	7,006
1916	.....	11,834
1917	.....	71
1918	.....	44
1919	.....	.....
1920	.....	.....
1921	1,563	364
1922	.....	.....
1923	70	55
1924	.....	.....
1925	72	24
1926	518	110
1927	1,307	530

Manganese Ore

	Tons.	Dollars.
1871	.....	12,321
1881	642	29,432
1891	48,559	628,672
1901	134,582	1,163,971
1913	407,169	2,195,565
1914	288,837	1,841,472
1915	206,913	1,494,965
1916	492,967	5,358,087
1917	656,026	10,542,572
1918	557,711	11,944,515
1919	373,202	16,358,741
1920	323,901	8,086,001
1921	682,770	10,199,612
1922	257,208	1,536,662
1923	228,431	2,658,688
1924	161,078	3,814,808
1925	189,087	4,978,517
1926	311,036	8,208,184
1927	349,016	10,420,088

Manganese Borate

	Pounds.	Dollars.
1924	17,540	1,911
1925	10,164	713
1926	24,166	1,731
1927	11,720	1,076

Manganese Resinate

	Pounds.	Dollars.
1924	66,490	4,980
1925	45,306	3,744
1926	.....	.....
1927	.....	.....

Manganese Sulphate

	Pounds.	Dollars.
1924	85,293	4,344
1925	97,595	4,733
1926	57,729	3,080
1927	26,982	1,675

Manganese Compounds and Salts, N. E. S.

	Pounds.	Dollars.
1924	288,513	24,271
1925	140,430	6,613
1926	299,743	17,315
1927	286,770	16,157

Mangrove Extract for Tanning

	Pounds.	Dollars.
1924	5,646,528	137,394
1925	3,527,478	87,523
1926	2,093,087	57,140
1927	2,038,507	60,857

Manna, Crude

	Pounds.	Dollars.
1871	.....	13,283
1881	35,456	15,061
1891	24,792	7,471
1901	24,883	12,084
1913	30,869	16,303
1914	38,240	32,848
1915	36,853	12,276
1916	68,447	32,434
1917	75,336	48,618
1918	93,097	51,032
1919	44,063	27,794
1920	112,818	52,145
1921	29,824	14,474
1922	32,768	15,025
1923	97,065	30,024
1924	24,609	12,075
1925	73,328	29,668
1926	55,049	21,496
1927	47,410	15,916

Manna, Advanced in Value

	Pounds.	Dollars.
1925	2,465	2,134
1926	13	14
1927	1,139	522

Manure Salts, Double Manure Salts and Hard Salts

	Tons.	Dollars.
1913	172,557	1,798,772
1914	260,977	2,757,013
1915	66,411	787,151
1916	2,278	42,368
1917	324	7,794
1918	225	9,047
1919	.....	.....
1920	240,899	8,215,063
1921	123,273	4,165,817
1922	81,442	957,443
1923	234,026	2,150,254
1924	244,994	2,687,062
1925	300,547	2,858,124
1926	372,124	3,716,362
1927	256,053	2,708,938

Marjoram Leaves, Unground

	Pounds.	Dollars.
1924	330	50
1925	.....	.....
1926	.....	.....
1927	6,963	1,816

Marshmallow or Althea Flowers and Leaves

	Pounds.	Dollars.
1913	561	27
1914	.....	.....
1915	4,696	245
1916	8,161	1,126
1917	21,713	2,033
1918	10,779	1,239
1919	4,869	770
1920	48,526	10,566
1921	13,699	1,524
1922	.....	.....
1923	17,122	1,329
1924	9,282	439
1925	4,424	282
1926	10,287	909
1927	13,413	1,118

Marshmallow or Althea Root, Crude

	Pounds.	Dollars.
1913	4,270	538
1914	6,049	514
1915	6,645	1,209
1916	7,242	1,926
1917	23,120	5,846
1918	24,246	6,524
1919	12,519	5,316
1920	63,099	17,369
1921	25,493	5,491
1922	3,710	493
1923	2,118	282
1924	7,773	1,327
1925	17,515	1,892
1926	10,599	1,883
1927	14,362	2,949

Matches, Friction or Lucifer

		Dollars.
1871	.....	.....
1881	.....	17,676
1891	.....	88,041
1901	.....	176,909
1913	.....	721,081
1914	.....	889,838
1915	.....	653,699
1916	.....	909,430
1917	.....	1,880,808
1918	.....	3,343,900
1919	.....	1,406,151
1920	.....	945,297
1921	.....	1,135,284
1922	.....	1,904,709
1923	.....	1,997,765
1924	.....	2,054,834
1925	.....	2,225,848
1926	.....	2,194,515
1927	.....	2,231,895

Mate, Crude

	Pounds.	Dollars.
1924	2,309	808
1925	.....	.....
1926	6,922	1,695
1927	1,452	95

Mate, Advanced in Value

	Pounds.	Dollars.
1925	7,582	1,380
1926	.....	.....
1927	24,129	4,148

Meat Extracts, Fluid

	Pounds.	Dollars.
1913	29,091	11,096
1914	3,768	3,956
1915	3,738	4,428
1916	172	264
1917	1,990	3,632
1918	12	22
1919	1,613	1,677
1920	11,584	16,078
1921	2,497	2,117
1922	2,174	3,862

Not stated after 1922.

Meat Extracts, All Other

	Pounds.	Dollars.
1913	106,313	138,489
1914	130,672	198,187
1915	97,656	139,936
1916	78,614	100,852
1917	93,108	155,766
1918	1,401	1,411
1919	9,482	12,111
1920	14,375	14,114
1921	87,283	57,737
1922	123,020	116,369

Not stated after 1922.

Meat Extracts

	Pounds.	Dollars.
1923	250,889	243,644
1924	336,678	304,400
1925	267,954	223,435
1926	319,784	399,504
1927	478,644	704,373

Menthol

	Pounds.	Dollars.
1913	49,896	289,058
1914	127,924	408,954
1915	111,020	236,759
1916	145,208	300,589
1917	172,767	398,191
1918	172,450	446,386
1919	243,743	1,055,920
1920	181,160	1,208,908
1921	239,297	1,575,824
1922	162,263	770,694
1923	233,168	1,399,787
1924	207,624	1,539,519
1925	273,197	2,580,489
1926	407,581	2,645,302
1927	538,401	1,374,106

Mercurial Medicinal Preparations, N. E. S.

	Pounds.	Dollars.
1921	6,769	8,149
1922	1,967	1,424
1923	1,935	3,520

Included in "Mercury Preparations, N. E. S.," after 1923.

Mercury Oxide (Red Precipitate)

	Pounds.	Dollars.
1924	8,728	6,672
1925	11,752	9,881
1926	36,500	34,151
1927	23,520	23,850

Mercury Preparations, N. E. S.

	Pounds.	Dollars.
1924	14,460	12,201
1925	24,262	19,887
1926	8,378	7,043
1927	12,301	13,440

Metacresol, Orthocresol and Paracresol

	Pounds.	Dollars.
1918	20,708	1,404
1919	11,200	1,221
1920	2,240	2,055
1921	204	175
1922	3,290	518
1923	13,714	7,361

Stated separately after 1923.

Metacresol, Orthocresol and Paracresol, Purity Less than 90%

	Pounds.	Dollars.
1924	3,213	1,697
1925	.....	.....
1926	.....	.....
1927	.....	.....

Metacresol, Orthocresol and Paracresol, Purity of 90% or More

	Pounds.	Dollars.
1924	9,001	1,211
1925	16,403	3,908
1926	115,352	15,071
1927	131,501	22,778

Methanol

	Gallons.	Dollars.
1913	302	387
1914	109,022	42,598
1915	39,485	11,880
1916	46,829	9,496
1917	11,267	4,502
1918	205,276	202,994
1919	4,375	11,141
1920	566	1,956
1921	214,328	525,730
1922	20	31
1923	15,788	12,580
1923	249	128
1925	308,088	141,044
1926	494,982	223,906
1927	1,661,715	735,407

Imports Into the United States

Methylanthraquinone

	Pounds.	Dollars.
1927	4,989	1,147

Mica, Ground

	Pounds.	Dollars.
1913	577,061	6,592
1914	401,608	4,002
1915	878,768	4,143
1916	436,037	4,302
1917	152,963	1,584
1918	111,067	1,384
1919	612	272
1920	6,995	10,223
1921	760	1,755
1922	285,295	4,289
1923	1,299,136	23,362
1924	1,444,559	23,896
1925	1,279,516	18,474
1926	420,120	5,807
1927	20,672	378

Mineral Salts Obtained by Evaporation from Mineral Waters

	Pounds.	Dollars.
1901	150,631	31,811
1913	103,337	35,420
1914	82,569	40,840
1915	10,757	9,642
1916	425	213
1917	626	313
1918	4,699,735	14,230
1919	1,414,450	19,237
1920	753,859	10,946
1921	97,708	13,814
1922	608,540	13,379
1923	37,863	18,685
1924	26,459	28,735
1925	26,890	24,019
1926	438,125	25,095
1927	111,108	22,639

Monazite Sand and Other Thorium Ores

	*Tons.	Dollars.
1913	1,145,010	94,425
1914	170,792	12,984
1915	1,493,028	133,819
1916	2,468,146	191,576
1917	4,020,023	263,331
1918	4,961,385	332,383
1919	952,304	55,898
1920	1,148,447	99,672
1921	1,036,420	71,745
1922	101,550	7,978
1923	3,356,044	202,249
1924	480	29,654
1925	.....	.....
1926	151	12,940
1927	596	45,837

* Quantity stated in pounds prior to 1924.

Morphine Sulphate

	Ounces.	Dollars.
1871	237	1,066
1881	22,358	55,531
1891	29,564	42,269
1901	50,819	147,517
1913	24,797	141,221
1914	5,805	14,220
1915	1,383	3,300
1916	2,685	8,908
1917	5,584	22,675
1918	25,115	202,266
1919	25,370	158,307
1920	7,460	32,111
1921	1,550	4,594
1922	3,460	6,406
1923	200	361

No imports allowed after 1923.

Moss and Seaweeds, Unmanufactured

	Pounds.	Dollars.
1913	.....	159,180
1914	.....	246,196
1915	.....	183,029
1916	.....	224,928
1917	.....	182,868
1918	.....	234,465
1919	13,291,917	257,154
1920	6,872,908	460,070
1921	7,988,370	505,100
1922	7,744,683	477,453
1923	12,558,582	571,390
1924	8,601,207	354,745
1925	10,037,494	601,571
1926	10,307,316	650,540
1927	15,096,398	638,664

Musk, Artificial, Etc.

	Pounds.	Dollars.
1925	69,597	235,723
1926	140,080	378,568
1927	132,375	341,991

Musk, in Grain

	Ounces.	Dollars
1913	.....	7,699
1914	.....	3,991
1915	.....	635
1916	.....	534
1917	.....	63,304
1918	.....	29,246
1919	6,269	7,158
1920	414	3,228
1921	3,059	30,985
1922	2,198	25,989

Not stated after 1922.

Musk in Pod

	Ounces.	Dollars.
1891	6,167	59,291
1901	9,353	71,300
1913	12,994	124,855
1914	3,331	30,378
1915	10,115	65,882
1916	7,390	62,094
1917	12,415	80,026
1918	5,516	33,970
1919	10,240	176,008
1920	16,058	261,320
1921	5,823	96,788
1922	5,352	70,314

Not stated after 1922.

Musk in Grain or Pod

	Pounds.	Dollars.
1923	754	152,314
1924	1,074	139,727
1925	627	197,644
1926	402	151,322
1927	626	204,763

Myrobalans Fruit

	*Tons.	Dollars.
1913	19,735,724	195,264
1914	24,256,373	438,672
1915	18,417,434	198,347
1916	25,612,765	375,401
1917	16,087,468	421,824
1918	4,408,522	110,444
1919	9,597,836	188,517
1920	62,196,177	993,932
1921	28,077,222	372,205
1922	28,567,166	194,465
1923	47,218,672	462,755
1924	13,572	352,057
1925	11,201	325,541
1926	12,976	514,771
1927	17,213	573,839

* Quantity stated in pounds prior to 1924.

Naphthalene, Solidifying at Less Than 79 Degree C.

	Pounds.	Dollars.
1918	3,579,187	146,658
1919	3,591,108	109,381
1920	6,113,768	165,383
1921	13,925,789	515,078
1922	2,344,951	52,496
1923	12,153,047	287,836
1924	14,020,568	397,386
1925	2,044,728	34,256
1926	5,354,458	97,232
1927	6,419,923	118,597

Naphthalene, Solidifying at 79 Degree C. or Above

	Pounds.	Dollars.
1918	92,888	4,998
1919	60	10
1920	161,871	3,076
1921	3,974,776	439,233
1922	53,496	5,453
1923	32,874	2,928
1924	14,134	1,326
1925	20	15
1926	.....	.....
1927	424	125

Naphthol, Alpha and Beta, Not Medicinal

	Pounds.	Dollars.
1921	54,341	64,248
1922	279,623	49,353
1923	10,050	22,120
1924	14,352	31,771
1925	2,310	975
1926	12,955	19,155
1927	28,191	35,176

Naphthylamine and Naphthylenediamine

	Pounds.	Dollars.
1918	11,761	5,896
1919	.....	.....
1920	.....	.....
1921	60,695	7,206
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	250	255

Nickel Oxide

	Pounds.	Dollars.
1913	1,124	398
1914	2,720	1,245
1915	1,071	505
1916	497	130
1917	21,488	6,478
1918	5,534	1,406
1919	7,774	2,430
1920	1,076	324
1921	1,155	165
1922	60,698	17,414
1923	2,966,259	322,586
1924	1,407,931	176,086
1925	796,071	121,107
1926	1,777,799	247,353
1927	1,264,188	220,447

Nitroanilin, Para and Meta, Etc.

	Pounds.	Dollars.
1925	500	575
1926	29,300	9,617
1927	7,560	3,438

Nitrobenzol

	Pounds.	Dollars.
1920	43,623	7,222
1921	23,781	2,790

Not stated after 1922.

Nitrophenylenediamine

	Pounds.	Dollars.
1922	1,132	6,590
1923	.....	.....
1924	.....	.....
1925	.....	.....

Not stated after 1925.

Novocain or Procain

	Pounds.	Dollars.
1924	5	210
1925	.....	.....
1926	5	610
1927	3	1,020

Nutgalls and Gall Nuts

	Pounds.	Dollars.
1901	.....	248,746
1913	.....	126,435
1914	.....	177,788
1915	.....	137,972
1916	.....	420,050
1917	.....	214,653
1918	.....	872,173
1919	1,760,746	362,976
1920	2,776,978	647,368
1921	2,248,951	532,077
1922	565,503	75,496
1923	3,497,713	335,535
1924	2,386,592	208,402
1925	2,932,689	287,525
1926	3,359,696	350,558
1927	3,726,423	354,000

Nutgall Extract

	Pounds.	Dollars.
1913	145,919	18,228
1914	205,130	25,017
1915	157,084	23,262
1916	61,055	11,444
1917	45,760	9,867
1918	36,475	12,761
1919	34,033	12,508
1920	48,654	26,565
1921	4,219	1,114
1922	32,458	8,192
1923	156,505	28,455

Included in "Acid, Tannic, Not Medicinal," after 1923.

Nutmegs, Unground

	Pounds.	Dollars.
1871	919,990	390,175
1881	999,504	573,917
1891	1,324,893	664,277
1901	1,922,689	376,447
1913	3,458,339	368,984
1914	1,755,653	184,779
1915	2,879,986	283,861
1916	3,590,959	420,503
1917	4,201,872	661,012
1918	3,437,056	528,950
1919	3,893,019	674,016
1920	3,651,319	601,849
1921	3,474,243	576,103
1922	3,916,059	447,349
1923	5,081,686	572,983
1924	3,174,098	550,676
1925	3,969,050	1,160,776
1926	3,606,574	1,178,227
1927	3,837,333	1,001,192

Nux Vomica

	Pounds.	Dollars.
1871	496,639	13,972
1881	1,172,909	17,649
1891	1,394,818	32,930
1901	1,581,757	30,566
1913	2,306,735	39,380
1914	1,891,072	32,983
1915	2,245,338	51,507
1916	4,355,964	134,366
1917	2,445,984	86,018
1918	2,739,804	111,711
1919	4,543,710	348,559
1920	4,470,323	275,904
1921	3,190,255	272,535
1922	1,063,606	70,998
1923	2,329,747	120,849
1924	1,261,828	37,166
1925	1,612,198	50,293
1926	1,940,754	39,656
1927	3,367,125	76,747

Oak Bark

	Pounds.	Dollars.
1925	560	36
1926	1,250	14
1927	.....	.....

Oak Extract for Tanning

	Pounds.	Dollars.
1921	1,484,032	84,353
1922	496,679	27,557
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Ochers, Crude, Not Ground

	Pounds.	Dollars.
1871	2,954,716	40,270
1881	3,589,600	65,393
1891	6,823,251	79,465
1901	7,410,929	55,501
1913	17,583,272	162,387
1914	21,641,976	154,547
1915	17,430,128	124,359
1916	18,049,375	153,880
1917	17,873,109	213,272
1918	7,087,557	131,065
1919	13,577,765	341,701
1920	13,264,966	229,526
1921	25,172,178	324,496
1922	11,856,246	198,701
1923	7,284,183	113,928
1924	105,087	1,913
1925	235,090	3,448
1926	235,622	4,470
1927	199,295	3,908

Ocher and Sienna, Washed or Ground

	Pounds.	Dollars.
1924	14,151,414	176,416
1925	19,172,432	222,105
1926	18,695,498	305,381
1927	17,565,140	370,759

Oilcake and Oilcake Meal, Coconut or Copra

	Pounds.	Dollars.
1917	29,867	400
1918	34,824	355
1919	3,474,947	51,437
1920	80,993,960	1,535,468
1921	117,208,327	2,038,122
1922	37,162,444	955,691
1923	62,626,038	1,041,922
1924	58,161,605	541,502
1925	55,249,461	815,736
1926	44,754,819	595,568
1927	27,802,206	301,458

Oilcake and Oilcake Meal, Cottonseed

	Pounds.	Dollars.
1901	.....	...
1913	400,686	3,322
1914	5,744,090	53,214
1915	1,743,113	15,706
1916	10,289,336	108,413
1917	34,281,702	372,812
1918	29,877,055	456,848
1919	51,377,272	1,049,182
1920	35,093,455	824,834
1921	22,061,743	423,801
1922	3,890,509	51,046
1923	667,046	10,412
1924	2,461,072	45,977
1925	5,016,007	96,010
1926	969,609	14,600
1927	27,451,364	370,702

Oilcake and Oilcake Meal, Cottonseed and Linseed (Bibby's)

	Pounds.	Dollars.
1913	2,571,694	37,455
1914	2,406,035	24,332
1915	2,996,201	38,238
1916	10,819,748	129,843
1917	6,570,668	82,808
1918	2,751,880	84,985
1919	2,502,984	54,750
1920	1,998,424	56,740
1921	4,773,303	107,794
1922	8,209,010	151,800
1923	3,627,993	72,634
1924	442,000	5,709
1925	1,284,010	23,278
1926	377,440	7,494
1927	708,630	11,813

Oilcake and Oilcake Meal, Linseed

	Pounds.	Dollars.
1924	17,548,693	326,875
1925	19,087,026	347,923
1926	19,750,556	408,876
1927	39,341,526	790,747

Oilcake and Oilcake Meal, Peanut

	Pounds.	Dollars.
1920	1,120,277	30,006
1921	101,072	2,188
1922	.....	.....
1923	459,056	12,018
1924	7,382,872	140,459
1925	2,790,380	44,524
1926	2,170,000	41,757
1927	3,814,601	70,237

Oilcake, Soya Bean

	Pounds.	Dollars.
1913	7,004,808	93,002
1914	3,163,260	38,255
1915	5,975,592	64,307
1916	10,468,001	103,081
1917	11,760,985	136,064
1918	586,830	9,964
1919	2,763,090	129,277
1920	16,273,785	406,395
1921	31,228,207	655,805
1922	17,701,339	339,021

Not stated after 1922.

Oilcake, All Other Bean

	Pounds.	Dollars.
1913	579,794	5,914
1914	142,878	1,685
1915	724,072	13,035
1916	4,802,119	53,173
1917	895,079	11,400
1918	1,389,434	17,628
1919	614,192	14,508
1920	2,056,639	42,082
1921	10,374,980	269,166
1922	4,591,694	105,311

Not stated after 1922.

Oilcake and Oilcake Meal, Bean (Soya and Other)

	Pounds.	Dollars.
1923	27,722,028	525,018
1924	31,109,043	576,286
1925	41,315,288	773,973
1926	35,496,842	731,684
1927	32,572,056	830,427

Oilcake and Oilcake Meal, All Other

	Pounds.	Dollars.
1901	1,749	172
1919	352,049	23,437
1920	4,832,987	111,056
1921	10,946,891	200,299
1922	3,975,911	52,876
1923	19,387,703	364,289
1924	11,185,644	186,304
1925	6,495,406	106,607
1926	7,346,736	140,771
1927	6,389,911	126,827

Oil, Almond, Bitter

	Pounds.	Dollars.
1871	1,440	14,122
1881	3,642	12,342
1891	4,795	9,958
1901	4,096	9,998
1913	10,442	25,620
1914	7,525	21,954
1915	2,711	9,184
1916	3,602	18,400
1917	4,128	27,751
1918	1,887	18,154
1919	1,333	14,427
1920	4,428	19,245
1921	4,825	14,979
1922	4,461	18,270
1923	9,253	28,187
1924	6,602	19,025
1925	11,962	21,868
1926	7,138	16,748
1927	11,947	30,297

Oil, Almond, Sweet

	Pounds.	Dollars.
1871	18,959	5,681
1881	34,325	12,641
1891	51,384	12,249
1901	81,074	17,512
1913	152,300	63,583
1914	52,550	22,777
1915	43,321	23,496
1916	68,838	36,400
1917	38,930	23,431
1918	36,283	25,052
1919	29,586	26,456
1920	55,096	33,420
1921	43,515	21,963
1922	71,418	29,773
1923	54,430	25,529
1924	76,677	25,868
1925	56,730	36,265
1926	81,983	61,750
1927	77,844	59,384

Oil, Amber

	Pounds.	Dollars.
1871	2,279	583
1881	6,211	1,431
1891	3,444	894
1901	38,082	3,304
1913	18,707	1,027
1914	15,648	1,058
1915	2,720	289
1916	674	250
1917	7,580	2,932
1918	1,080	458
1919	3,900	4,530
1920	2,227	1,938
1921	1,084	354
1922	1,840	653
1923	544	361
1924	200	86
1925	1,500	694
1926	1,547	497
1927	2,750	435

Oil, Ambergris

	Pounds.	Dollars.
1891	78	1,509
1901	26	2,258
1919	2	212
1920	.....	.....
1921	.....	.....
1922	3	409

Not stated after 1922.

Oil, Anise

	Pounds.	Dollars.
1871	10,475	16,355
1881	27,232	49,669
1891	37,335	55,556
1901	57,564	67,926
1913	127,501	173,078
1914	42,672	55,692
1915	117,188	119,972
1916	206,609	156,411
1917	266,686	150,849
1918	160,774	122,459
1919	77,757	72,836
1920	218,382	227,172
1921	225,829	141,497
1922	42,230	21,638
1923	273,591	132,580
1924	183,819	62,743
1925	141,513	60,793
1926	131,855	77,298
1927	197,658	99,399

Oil, Bergamot

	Pounds.	Dollars.
1871	30,592	93,260
1881	41,796	95,390
1891	44,110	131,801
1901	75,640	143,740
1913	64,259	310,835
1914	38,647	148,753
1915	58,321	157,519
1916	69,440	178,300
1917	50,634	179,182
1918	57,689	241,465
1919	41,262	185,318
1920	92,708	369,727
1921	33,565	143,667
1922	62,566	249,302
1923	87,626	321,997
1924	84,578	246,541
1925	100,112	326,157
1926	90,926	386,903
1927	108,657	639,532

Imports Into the United States

Oil, Birch Tar

	Pounds.	Dollars.
1914	40,123	1,898
1915	12,098	571
1916	47,757	3,183
1917	24,073	3,717
1918	110,055	22,443
1919	.....	.....
1920	220	108
1921	2,467	510
1922	3,705	1,142
1923	10,820	539
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	2,248	510

Oil, Cajeput

	Pounds.	Dollars.
1871	1,864	1,163
1881	7,019	4,421
1891	22,260	9,827
1901	12,350	4,472
1913	9,143	3,224
1914	14,110	4,757
1915	19,243	6,999
1916	96,626	18,992
1917	79,585	29,585
1918	10,563	3,538
1919	18,853	11,239
1920	27,775	18,829
1921	7,375	2,601
1922	2,904	1,515
1923	45,075	16,008
1924	20,025	7,850
1925	5,423	2,874
1926	14,055	5,689
1927	13,715	6,375

Oil, Camomile

	Pounds.	Dollars.
1881	25	316
1891	19	249
1901	25	456
1913	4½	88
1914	12	247
1915	3	67
1916	.....	.....
1917	.....	.....
1918	5	60
1919	.....	.....
1920	15	233
1921	11	128
1922	10	438
1923	5	194
1924	.....	.....
1925	.....	.....
1926	6	145
1927	.....	.....

Oil, Camphor

	Pounds.	Dollars.
1913	.....	.....
1914	18,874	3,160
1915	68	12
1916	8,333	5,708
1917	224	899
1918	236,000	21,245
1919	131	56
1920	3,635	1,270
1921	39,140	6,688
1922	7,568	2,721
1923	1,890,469	155,134
1924	1,757,125	137,534
1925	2,389,676	176,336
1926	1,322,787	123,378
1927	2,680,453	248,376

Oil, Cananga or Ylang Ylang

	Pounds.	Dollars.
1924	24,903	100,471
1925	22,761	83,778
1926	25,173	113,326
1927	34,482	224,665

Oil, Caraway

	Pounds.	Dollars.
1871	6,305	8,772
1881	7,522	10,799
1891	.....	.....
1901	17,890	9,602
1913	10,107	10,453
1914	3,669	5,063
1915	18,107	20,730
1916	15,567	23,536
1917	3,723	4,208
1918	4,982	22,432
1919	.....	.....
1920	6,857	23,591
1921	6,071	11,388
1922	2,926	4,295
1923	7,125	26,575
1924	4,218	24,664
1925	7,882	30,211
1926	9,501	11,930
1927	8,460	11,571

Oil, Cassia and Cinnamon

	Pounds.	Dollars.
1871	25,734	26,754
1881	104,900	82,885
1891	27,980	22,732
1901	84,262	61,141
1913	123,645	97,438
1914	79,155	49,528
1915	54,962	34,411
1916	121,084	85,974
1917	153,244	130,112
1918	109,178	114,796
1919	123,150	201,295
1920	174,855	286,122
1921	102,010	133,551
1922	114,697	89,789
1923	224,782	277,833
1924	260,614	418,157
1925	325,561	500,133
1926	316,926	470,412
1927	384,578	526,710

Oil, Castor

	*Pounds	Dollars
1871	29,314	20,241
1881	1,464	959
1891	2,073	1,287
1901	462	292
1913	5,241	6,396
1914	189,583	88,053
1915	63,005	29,206
1916	253,077	223,180
1917	323,703	286,068
1918	1,175,064	1,366,573
1919	482,216	845,682
1920	271,425	298,001
1921	99,017	124,315
1922	45,734	35,260
1923	145,488	135,792
1924	271,498	32,113
1925	308,859	39,810
1926	492,504	52,170
1927	163,512	21,357

* Quantity stated in gallons prior to 1924.

Oil, Cedrat or Citron

	Pounds.	Dollars.
1891	311	2,836
1901	92	519
1913	115	555
1914	159	770
1915	788	3,721
1916	438	1,966
1917	.....	.....
1919	20	158
1920	336	531
1920	3	12
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	26	16
1926	287	561
1927	489	1,732

Oil, Chinese Nut

	*Pounds.	Dollars.
1871	131,832	79,881
1881	18,428	8,682
1891	67,312	30,641
1901	365,747	169,892
1913	6,004,045	2,738,000
1914	4,878,764	1,960,426
1915	4,723,584	1,649,270
1916	4,968,262	1,977,823
1917	6,846,631	4,046,132
1918	4,818,740	4,038,772
1919	6,218,557	7,248,054
1920	10,613,638	12,736,431
1921	4,439,975	4,817,082
1922	7,409,572	5,141,969
1923	11,918,985	10,188,994
1924	10,786,453	13,847,626
1925	94,696,963	10,957,533
1926	84,860,373	9,118,828
1927	102,428,461	12,318,928

* Quantity stated in gallons prior to 1925.

Oil, Citronella and Lemon Grass

	Pounds.	Dollars.
1871	18,202	13,535
1881	103,152	84,200
1891	355,735	73,764
1901	288,247	59,593
1913	885,486	287,579
1914	702,516	263,149
1915	865,376	307,676
1916	1,054,211	387,631
1917	1,082,035	445,732
1918	900,853	369,234
1919	549,837	246,576
1920	1,062,821	673 029
1921	586,607	402,636
1922	1,219,669	462,132
1923	848,283	510,152
1924	786,743	558,438
1925	1,171,911	913,787
1926	1,368,588	918,034
1927	1,259,507	631,110

Oil, Civet

	Ounces.	Dollars
1881	.....	38
1891	.....	.....
1901	792	1,326
1913	1,155	1,688
1914	250	392
1915	5,181	7,365
1916	.....	.....
1917	.....	.....
1918	3,277	5,136
1919	361	800
1920	3,000	7,290
1921	1,504	3,711
1922	1,771	1,751
1923	16,853	29,712

Not stated after 1923.

Oil, Clove

	Pounds.	Dollars.
1924	4,340	8,537
1925	1,709	2,866
1926	3,953	6,998
1927	1,658	2,479

Oil, Coconut

	Pounds.	Dollars.
1871	195,462	87,288
1881	577,624	297,492
1891	10,665,054	560,833
1901	27,055,646	1,386,247
1913	50,493,858	4,182,654
1914	74,588,195	6,726,107
1915	63,249,424	5,430 581
1916	66,574,349	6,062,225
1917	79,359,009	9,141,586
1918	259,004,748	30,919,783
1919	347,200,288	43,769,146
1920	269,226,961	38 588,135
1921	166,417,897	20,267,334
1922	213,344,572	16,274.425
1923	145,807,433	10,099,173
1924	181,318,954	13,935,069
1925	950,270,867	20,250,222

Stated separately after 1925.

Oil, Coconut, Product of Philippine Islands

	Pounds.	Dollars.
1926	200,878,120	18,113,291
1927	286,776,114	23,751,536

Oil, Coconut, All Other

	Pounds.	Dollars.
1926	628,805	71,990
1927	78,598	7,201

Oil, Cod

	Gallons.	Dollars.
1913	466,494	135,969
1914	1,091,246	382,992
1915	1,372,413	433,142
1916	1,578,227	678.327
1917	1,163,566	728.804
1918	1,747,791	1,526,332
1919	932,948	1,091,722
1920	1,535,876	1,500,353
1921	877,521	561,195
1922	1,775,219	660 672
1923	1,959,223	986,221
1924	1,494,386	802,416
1925	1,979,623	957,603
1926	2,062,062	1,030.785
1927	2,405,472	1,221,149

Oil, Codliver

	Gallons.	Dollars.
1871	.....	20,476
1881	144,771	45,300
1891	249,894	98,885
1901	235,949	137,765
1913	262,516	137,372
1914	371,567	262,927
1915	264,630	157.090
1916	170,876	334,006
1917	265,557	659,192
1918	264,108	585,172
1919	161,291	449,014
1920	407,481	962.427
1921	337,139	506,849
1922	262,763	169.078
1923	414,656	272,885
1924	710,949	605,843
1925	1,136,804	859,434
1926	1,258,348	1,140,991
1927	2,063,896	2,023,043

Oil, Cornmint

	Pounds.	Dollars.
1927	8,840	27,644

Oil, Cottonseed

	Pounds.	Dollars.
1881	20	7
1891	.....	.....
1901	8,185	6,259
1913	3,883,906	185,396
1914	17,510,918	1,046,703
1915	15,162,360	728,961
1916	17,516,391	924,654
1917	12,961,339	985 616
1918	14,378,018	1,639,882
1919	20,964,012	2,685,027
1920	24.164,821	3,255,228
1921	1,315,265	131,324
1922	240	25
1923	45,297	4,575
1924	148	36
1925	.....	.....
1926	282,712	22,174
1927	6,395,939	676,342

Oil, Creosote, or Dead

	Gallons.	Dollars.
1901	2,072,428	155,331
1913	63,997,802	3,711,328
1914	59,271,677	3,822.919
1915	37,352,340	2,541,845
1916	40,496,987	3,206.780
1917	29,066,915	2,183,859
1918	3,857,869	329,846
1919	9,094,960	1,096.319
1920	8,338,761	1,171,717
1921	27,779,736	5,887,340
1922	39,143,044	3,965,796
1923	52,565,292	6,850,489
1924	81,353,086	13,522,540
1925	88,416,560	11,435,278
1926	84,345,330	10,927,967
1927	89,256,536	13,252,721

Oil, Croton

	Pounds.	Dollars.
1871	4,571	4,744
1881	2,542	2,112
1891	59	35
1901	462	219
1913	4,873	4,414
1914	6,186	5.649
1915	4,010	3,481
1916	.....	.....
1917	500	503
1918	1,200	1,274
1919	.....	.....
1920	2,478	3,142
1921	2,502	2,491
1922	1,800	1.813
1923	3,600	2,701
1924	12,753	3,442
1925	5,840	3.857
1926	600	364
1927	500	367

Oils, Essential and Distilled, Not Elsewhere Specified

	Pounds.	Dollars.
1901	.....	235,699
1913	.....	821,396
1914	.....	804,505
1915	.....	743.076
1916	.....	767,719
1917	.....	970,736
1918	.....	1,142.496
1919	.....	309,971
1920	.....	2,740,152
1921	.....	2,198,699
1922	.....	1,622,947
1923	.....	1,987,606
1924	149,566	336,115
1925	42,620	293,257
1926	112,890	412,117
1927	260,645	236,614

Oil, Eucalyptus

	Pounds.	Dollars.
1913	31,047	7.205
1914	68,053	21.079
1915	99,218	27,095
1916	110,736	29.903
1917	230,035	83.111
1918	269.275	97.874
1919	116,781	43,639
1920	291.492	137,190
1921	156,394	70,681
1922	175,901	66,871
1923	185,630	58.404
1924	247,826	91,834
1925	180,665	69.689
1926	200,749	69.923
1927	238,368	84,420

Oils, Expressed and Extracted, Not Elsewhere Specified

	Pounds.	Dollars.
1901	.....	21,163
1913	.....	61,027
1914	.....	49,053
1915	.....	65.437
1916	.....	118,295
1917	.....	79.889
1918	.....	138,660
1919	1,088,636	174,463
1920	644,211	134,481
1921	554,659	83,459
1922	371,440	52,828
1923	9,358,574	686,766
1924	1,519,967	97.721
1925	344,759	29,746
1926	667,838	72,783
1927	1,954,078	194,180

Oil, Fennel

	Pounds.	Dollars.
1871	373	392
1881	1,815	2,331
1891	774	463
1901	1,839	1,353
1913	5,702	4,190
1914	4,078	2,416
1915	409	441
1916	610	789
1917	.....	.....
1918	2,094	2,512
1919	661	942
1920	1,437	2,211
1921	20	30
1922	972	1,026
1923	616	361
1924	369	324
1925	2,930	1,913
1926	920	671
1927	275	135

Oil, Fish, Not Specially Provided For

	Gallons.	Dollars.
1901	494,036	122,360
1913	519,121	152,803
1914	517,562	154,775
1915	439,741	108,739
1916	720,083	225,536
1917	2,280,013	863,059
1918	1,532,512	772.721
1919	1,263,374	1,019,195
1920	547,545	403.545
1921	324,646	166,792
1922	285,605	67.648
1923	733,112	225,607
1924	121,802	41,281
1925	165,373	51,076
1926	124.800	46,192
1927	62,308	21,971

Oil, Fusel

	Pounds.	Dollars.
1871	3,500	2,063
1881	961	290
1891	345,001	16,780
1901	2,572,343	139,190
1913	5,116,660	1,183,872
1914	5,679,801	888,869
1915	3,298,228	699,512
1916	2,162,617	695.196
1917	1,614,507	629,414
1918	1,706,528	546,589
1919	1,464,500	386,416
1920	6,192,079	1,199,995
1921	1,083,336	274,423
1922	552,036	101,636
1923	2,479,194	610,536
1924	1,651,727	741,735
1925	806,091	141,028
1926	116,612	32,343
1927	635,291	90,553

Includes Amyl and Butyl Alcohol prior to 1924.

Oil, Geranium

	Pounds.	Dollars.
1924	105,770	591,237
1925	153,511	870,219
1926	232,085	667,639
1927	230,183	543,615

Oil, Hempseed

	*Pounds.	Dollars.
1881	10,615	6,751
1891	140,163	66,744
1901	528,763	264,216
1913	.....	.....
1914	375	128
1915	.....	.....
1916	10	5
1917	.....	.....
1918	25,000	21,654
1919	162,131	152,865
1920	161,346	157,596
1921	20,868	28,582
1922	16,000	7,567
1923	.....	.....
1924	38,000	2,966
1925	.....	.....
1926	1,650	99
1927	152,080	11,366

*Quantity stated in gallons prior to 1924.

Oil, Herring, Menhaden and Sod

	Gallons.	Dollars.
1924	534,476	182,607
1925	288,713	115,066
1926	1,089,731	445,175
1927	2,927,161	1,019,108

Oil, Jasmine

	Pounds.	Dollars.
1881	.....	1,629
1891	441	283
1901	1,097	3,705
1913	3,416	39,554
1914	611	14,360
1915	261	5,160
1916	978	27,592
1917	348	8,366
1918	5,840	89,310
1919	12,227	204,005
1920	3,888	145,641
1921	2,115	110,957
1922	622	16,413
1923	297	10,668
1924	11	297
1925	.....	.....
1926	16	98
1927	10	261

Oil, Juniper

	Pounds.	Dollars.
1871	7,672	4,758
1881	7,073	4,147
1891	5,798	2,778
1901	13,155	5,226
1913	17,356	13,037
1914	14,545	8,691
1915	10,388	7,637
1916	975	1,988
1917	4,661	21,514
1918	21,346	67,147
1919	1,146	6,758
1920	8,885	37,019
1921	7,681	29,000
1922	12,546	20,293
1923	15,612	20,188
1924	20,204	16,634
1925	17,802	18,999
1926	13,976	16,166
1927	10,958	18,737
	9,305	

Oil, Lavender and Spike Lavender

	Pounds.	Dollars.
1881	38,167	58,100
1891	92,224	102,819
1901	102,402	101,329
1913	227,013	482,779
1914	64,541	100,431
1915	72,989	133,375
1916	198,205	271,815
1917	144,663	237,081
1918	122,958	273,466
1919	111,411	240,823
1920	173,873	364,865
1921	84,626	183,488
1922	163,500	269,590
1923	178,581	271,392
1924	173,635	411,102
1925	209,579	743.365
1926	194,761	627,493

Stated separately after 1926.

Oil, Lavender

	Pounds.	Dollars.
1927	154,216	583,663

Oil, Lemon and Orange

	Pounds.	Dollars.
1871	67,619	144,405
1881	88,480	181,495

Stated separately after 1881.

Oil, Lemon (Including Terpeneless)

	Pounds.	Dollars.
1891	151,460	225,755
1901	268,341	231,041
1913	410,003	794,215
1914	329,440	752,714
1915	561,387	630,338
1916	435,030	360,862
1917	557,288	459,179
1918	577,600	452,681
1919	345,799	327,370
1920	769,488	917,214
1921	543,489	559,970
1922	684.118	574,084
1923	592,089	402,427
1924	453,572	278,210
1925	580,169	416,597
1926	436,005	770,682
1927	422,398	789,126

Oil, Lignaloe or Bois de Rose

	Pounds.	Dollars.
1924	59,495	164,321
1925	52,843	178,800
1926	80,555	206,078
1927	87,743	154,874

Oil, Lime

	*Pounds.	Dollars.
1891	3,681	4,068
1901	5,904	5,980
1913	13,075	15,025
1914	16,559	23,828
1915	9,154	9.279
1916	19,765	29,694
1917	26,551	49,001
1918	29,137	73,685
1919	16,272	24,273
1920	61,824	87,873
1921	51,266	101.928
1922	27,200	24,343
1923	59,072	38,937
1924	40,857	36,448
1925	65,366	84,015
1926	40,749	126,385
1927	48,431	330,225

Imports Into the United States

Oil, Linseed, Raw, Boiled or Oxidized

	*Pounds.	Dollars.
1871	39,424	24,806
1881	9,692	4,711
1891	11,629	5,828
1901	14,036	7,598
1913	172,522	110,840
1914	187,983	91,544
1915	537,810	249,611
1916	56,899	36,399
1917	110,809	76,530
1918	51,271	34,370
1919	957,573	1,199,911
1920	4,566,008	6,583,515
1921	1,996,250	1,905,330
1922	22,463,851	11,957,084
1923	10,731,809	5,045,874
1924	17,536,378	1,843,671
1925	23,958,301	2,199,418
1926	10,419,769	787,167
1927	3,816,437	268,330

*Quantity stated in gallons prior to 1924.

Oil, Mace

	Pounds.	Dollars.
1871	187	160
1881	355	321
1891	605	613
1901	685	440
1913	5,737	2,611
1914	2,652	1,380
1915	4,776	2,606
1916	3,400	2,224
1917	3,000	2,414
1918	.....	.....
1919	.....	.....
1920	200	468
1921	.....	.....
1922	215	251
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Oil, Mineral, Crude, Petroleum

	*Barrels (42 gallons).	Dollars.
1871	356	102
1881	694	160
1891	.....	214
1901	118	17
1913	450,542,222	7,608,796
1914	843,080,788	11,779,938
1915	653,757,824	8,918,138
1916	859,736,962	12,226,179
1917	1,036,417,009	14,181,349
1918	1,348,419,493	18,239,207
1919	1,929,339,105	24,166,677
1920	2,824,332,765	33,791,375
1921	5,609,224,120	71,030,595
1922	4,710,620,837	72,960,648
1923	3,794,928,580	54,336,992
1924	3,557,189,072	65,293,250
1925	2,986,267,915	80,530,742
1926	2,408,796,807	72,079,930
1927	54,752,398	75,933,473

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Lubricating, Including Paraffin Oil

	*Barrels (42 gallons).	Dollars.
1913	116,192	35,196
1914	167,384	55,923
1915	60,412	11,609
1916	774,250	149,625
1917	409,746	40,710
1918	24,628	7,502
1919	551,142	75,451
1920	819,111	101,792
1921	4,344	3,792
1922	429,361	53,744
1923	2,517,850	456,870
1924	844,361	141,396
1925	1,247,983	206,091
1926	1,453,167	280,184
1927	35,447	142,724

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Medicinal

	Pounds.	Dollars.
1924	171,009	32,956
1925	187,988	30,812
1926	129,332	17,575
1927	1,797,438	132,038

Oil, Mineral, Refined, Benzin

	Gallons.	Dollars.
1913	14,162,423	1,266,896
1914	16,152,167	1,399,630
1915	6,783,627	727,855
1916	5,100	2,150

Not stated after 1916.

Oil, Mineral, Refined, Gasoline and Naphtha

	Gallons.	Dollars.
1913	570	118
1914	14,175	1,992
1915	1,136,797	34,701
1916	2,638	458

Not stated after 1916.

Oil, Mineral, Refined Benzin, Gasoline and Naphtha

	Gallons.	Dollars.
1917	10,744,592	1,396,101
1918	11,069,898	1,473,027
1919	11,760,856	1,867,863
1920	25,637,592	3,147,635
1921	31,778,815	3,711,948
1922	69,319,919	5,607,943
1923	87,801,664	7,176,506

See following classes:—

Oil, Mineral, Petroleum, Topped, Including Fuel Oil

	*Barrels (42 gallons).	
1924	389,363,276	9,311,001
1925	568,050,193	15,421,740
1926	518,938,987	14,858,089
1927	11,383,660	13,261,868

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Petroleum, Tops and Other Unfinished Distillates

	*Barrels (42 gallons).	Dollars.
1924	8,357,667	910,060
1925	19,889,081	1,293,396
1926	6,813,240	460,627
1927	464,449	1,501,226

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Petroleum, Gasoline, Naphtha, and Other Finished Light Products

	*Barrels (42 gallons).	Dollars.
1924	195,270,153	16,006,282
1925	155,496,561	15,298,811
1926	195,366,990	19,562,123
1927	4,907,328	26,375,012

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Petroleum Illuminating (Kerosene)

	*Barrels (42 gallons).	Dollars.
1924	275,711	43,945
1925	630,964	95,579
1926	811,291	118,643
1927	73,076	243,872

*Quantity stated in gallons prior to 1927.

Oil, Mineral, Refined, All Other

	Gallons.	Dollars.
1871	152	176
1881	21	7
1891	826,801	34,098
1901	24,532	5,897
1913	1,464,412	307,479
1914	1,796,093	430,664
1915	496,968	98,696
1916	1,727,683	134,815
1917	32,259,588	2,221,816
1918	43,927,718	2,406,764
1919	37,299,989	2,585,007
1920	59,040,338	3,945,468
1921	97,728,455	7,138,962
1922	112,073,487	7,179,162
1923	589,175,634	13,928,891

Included in foregoing classes after 1923.

Oil, Neroli or Orange Flower

	Pounds.	Dollars.
1891	2,757	51,984
1901	4,319	41,922
1913	38,365	171,982
1914	15,928	73,265
1915	13,251	31,478
1916	34,447	66,768
1917	23,639	66,394
1918	32,687	72,370
1919	10,595	52,853
1920	49,835	214,919
1921	22,780	95,207
1922	29,945	61,840
1923	6,551	81,502
1924	1,305	52,976
1925	695	21,216
1926	345	28,551
1927	1,045	74,510

Oil, Olive (for Manufacturing Purposes Only)

	*Pounds.	Dollars.
1871	139,051	111,450
1881	172,030	112,916
1891	503,947	242,889
1901	1,306,474	530,607
1913	725,100	483,329
1914	799,260	506,093
1915	717,361	498,689
1916	919,633	711,468
1917	787,348	736,520
1918	166,115	148,672
1919	119,842	185,767
1920	255,835	434,561
1921	261,689	267,579
1922	1,037,021	604,929
1923	5,417,706	3,536,696
1924	8,483,560	1,800,917
1925	9,466,195	1,694,574

*Quantity stated in gallons prior to 1924. Stated separately after 1925.

Oil, Olive, Edible

	*Pounds.	Dollars.
1871	142,476	257,868
1881	216,788	380,428
1891	600,936	731,006
1901	991,799	1,180,443
1913	4,772,775	6,227,526
1914	6,391,827	8,201,831
1915	6,622,246	8,119,512
1916	6,924,606	9,324,361
1917	7,707,094	10,769,754
1918	2,562,538	2,935,457
1919	4,071,766	7,573,551
1920	6,840,601	14,887,944
1921	4,683,204	12,214,272
1922	7,432,164	11,621,248
1923	76,701,825	12,291,905
1924	78,390,666	12,578,005
1925	81,324,993	13,983,787
1926	83,710,811	15,750,096
1927	86,688,172	17,378,800

*Quantity stated in gallons prior to 1923.

Oil, Olive, Inedible, Sulphured or Foots

	Pounds.	Dollars.
1926	45,159,425	3,522,677
1927	40,433,655	3,462,582

Oil, Olive, Inedible, All Other

	Pounds.	Dollars.
1926	10,903,542	1,355,411
1927	6,965,374	1,083,677

Oil, Orange (Including Terpeneless)

	Pounds.	Dollars.
1891	27,952	44,500
1901	72,218	109,832
1913	77,797	155,299
1914	104,491	222,118
1915	97,014	140,246
1916	97,359	134,025
1917	170,722	322,378
1918	196,846	330,507
1919	126,532	246,202
1920	282,349	953,514
1921	155,765	543,098
1922	210,034	558,374
1923	226,116	487,859
1924	192,223	435,706
1925	228,814	512,209
1926	220,737	520,248
1927	197,150	459,718

Oil, Oleo

	Pounds.	Dollars.
1927	395	49

Oil, Origanum

	Pounds.	Dollars.
1871	33,612	17,526
1881	31,398	14,979
1891	.....	.....
1901	10,305	2,205
1913	8,822	8,502
1914	507	630
1915	14,349	15,111
1916	24,222	24,291
1917	54,671	45,859
1918	3,851	3,424
1919	2,637	5,506
1920	11,522	23,206
1921	8,950	16,438
1922	.....	.....
1923	5,900	9,774
1924	47,176	59,047
1925	102,013	120,504
1926	42,578	55,834
1927	31,289	33,959

Oil, Orris

	Pounds.	Dollars.
1924	2,399	6,034
1925	107	4,194
1926	122	4,189
1927	366	13,243

Oil, Palm

	Pounds.	Dollars.
1881	9,325,090	309,355
1891	3,507,223	135,879
1901	8,081,252	419,466
1913	48,442,662	3,368,815
1914	61,753,482	4,118,077
1915	31,482,292	2,024,827
1916	40,621,318	2,918,523
1917	36,074,059	3,316,417
1918	27,408,494	2,527,872
1919	19,280,762	1,651,230
1920	50,165,387	6,529,094
1921	31,076,224	2,765,953
1922	39,159,342	2,420,742
1923	78,815,952	8,586,201
1924	86,784,400	5,733,281
1925	114,387,981	8,778,673
1926	152,254,206	11,982,782
1927	111,183,687	8,123,908

Oil, Palm Kernel

	Pounds.	Dollars.
1913	23,570,152	1,850,270
1914	30,588,958	2,826,972
1915	4,908,702	446,979
1916	6,273,340	479,738
1917	1,857,038	197,237
1918	18,018	2,583
1919	1,945,345	144,826
1920	53,508	9,900
1921	2,769,144	316,754
1922	2 489,490	209,551
1923	2,858,108	237,594
1924	1,768,704	148,335
1925	37,364,493	2,266,783
1926	85,074,356	8,017,700
1927	21,435,908	1,329,332

Oil, Palmarosa

	Pounds.	Dollars.
1924	2,471	9,020
1925	5,820	19,697
1926	3,038	9,115
1927	6,400	14,163

Oil, Patchouli

	Pounds.	Dollars.
1924	2,561	13,334
1925	3,617	12,905
1926	6,313	22,933
1927	3,505	18,251

Oil, Peanut

	*Pounds.	Dollars.
1913	1,221,676	820,359
1914	1,332,108	915,439
1915	830,638	565,707
1916	1,466,043	824,327
1917	3,018,468	2,028,096
1918	8,279,927	7,296,214
1919	11,393,615	11,493,969
1920	22,025,653	27,752,099
1921	2,444,794	2,347,980
1922	375,819	314,989
1923	4,401,071	453,035
1924	4,981,923	499,105
1925	2,910,137	342,959
1926	3,259,682	416,304

*Quantity stated in gallons prior to 1923.

1927	5,686,792	603,342

Oil, Peppermint

	Pounds.	Dollars.
1891	3,049	3,918
1901	1,201	1,353
1913	3,529	13,097
1914	18,794	41,367
1915	9,200	8,959
1916	17,066	12,573
1917	23,159	37,734
1918	29,360	28,953
1919	118,741	139,466
1920	148,227	270,333
1921	28,732	31,596
1922	6,648	9,827
1923	1,523	5,468
1924	96	277
1925	7,891	46,940
1926	32,438	269,666
1927	1,031	6,940

Oil, Perilla

	Pounds.	Dollars.
1913	.....	.....
1914	117,893	6,060
1915	69,174	5,485
1916	65,509	5,504
1917	442,619	39,276
1918	1,015,953	105,723
1919	1,430,163	201,412
1920	8,107,141	1,376,738
1921	3,783,757	466,504
1922	1,899,352	155,665
1923	6,652,224	734,193
1924	2,933,888	301,494
1925	6,198,815	776,736
1926	6,859,894	819,792
1927	4,711,685	469,620

Oil, Petitgrain

	Pounds.	Dollars.
1924	40,179	64,510
1925	27,759	53,522
1926	52,178	88,198
1927	57,781	85,463

Oil, Pine Needle

	Pounds.	Dollars.
1924	15,828	9,028
1925	16,745	6,480
1926	29,445	5,398
1927	7,650	2,506

Oil, Poppy Seed, Raw, Boiled or Oxidized

	*Pounds.	Dollars.
1881	.....	1,279
1891	7,604	4,627
1901	3,125	2,388
1913	9,605	7,788
1914	7,973	6,422
1915	11,645	7,072
1916	6,337	6,816
1917	2,789	3,734
1918	20	112
1919	1,296	1,952
1920	422	1,451
1921	1,051	2,420
1922	1,691	1,754
1923	590	1,227
1924	17,993	2,253
1925	51,808	7,516
1926	86,349	10,133
1927	135,737	17,015

*Quantity stated in gallons prior to 1924.

Oil, Rape (Colza)

	Gallons.	Dollars.
1881	.....	.....
1891	577,684	13,390
1901	.....	.....
1913	1,564,659	784,750
1914	1,463,099	704,747
1915	1,491,999	784,235
1916	2,534,679	1,414,022
1917	1,095,391	651,314
1918	2,751,875	2,697,152
1919	2,091,052	2,264,594
1920	1,229,526	1,525,747
1921	1,171,930	1,103,134
1922	1,351,827	929,370
1923	1,769,831	1,235,960
1924	2,066,513	1,364,466
1925	1,789,438	1,513,183
1926	2,097,042	1,618,523
1927	2,730,700	1,906,179

Oil, Rosemary

	Pounds.	Dollars.
1881	.....	6,597
1891	64,361	33,346
1901	31,283	14,723
1913	284,144	100,930
1914	85,243	30,177
1915	93,663	44,636
1916	95,815	30,544
1917	228,080	71,035
1918	204,105	71,541
1919	51,146	36,101
1920	309,210	228,749
1921	44,848	35,001
1922	159,250	63,755
1923	234,591	99,078
1924	143,603	51,067
1925	204,944	76,443
1926	106,622	50,731
1927	92,459	61,045

Oil, Rose (Otto of)

	Ounces.	Dollars.
1871	10,146	46,242
1881	13,168	75,130
1891	43,599	188,612
1901	45,482	192,874
1913	133,325	791,370
1914	40,454	301,000
1915	60,011	252,592
1916	40,887	169,744
1917	11,235	85,673
1918	22,653	89,049
1919	24,827	210,925
1920	80,094	657,090
1921	36,886	263,980
1922	27,700	190,923
1923	169,878	487,154
1924	66,223	331,052
1925	35,601	276,929
1926	46,015	305,020
1927	36,178	385,260

Oil, Rosewood

	Pounds.	Dollars.
1927	218	582

Oil, Sandalwood

	Pounds.	Dollars.
1924	53,084	251,835
1925	43,611	206,093
1926	7,774	29,197
1927	5,367	14,671

Oil, Seal

	Gallons.	Dollars.
1871	188,076	100,964
1881	100	72
1891	250	97
1901	1,294	459
1913	8,972	3,131
1914	179,734	64,963
1915	479,571	166,836
1916	510,002	271,979
1917	518,637	301,138
1918	148,202	100,328
1919	583,553	612,241
1920	27,951	25,101
1921	107,802	29,726
1922	316,394	88,092
1923	455,147	158,047
1924	595,878	288,820
1925	602,595	297,219
1926	338,545	196,202
1927	653,632	387,655

Oil, Sesame

	Pounds.	Dollars.
1871	6,012	427
1881	540,520	40,519
1891	328,091	22,064
1901	626,189	48,637
1913	1,936,647	158,442
1914	1,389,649	118,075
1915	341,545	28,653
1916	257,874	22,293
1917	76,057	11,874
1918	346,211	51,178
1919	2,335,193	357,564
1920	5,287,695	804,529
1921	79,274	15,498
1922	55,182	10,877
1923	7,539,838	846,840
1924	5,060,347	539,228
1925	6,430,660	766,008
1926	4,567,030	533,990
1927	7,067,668	829,659

Oil, Soya Bean

	Pounds.	Dollars.
1913	12,440,406	635,982
1914	16,363,645	830,570
1915	19,210,028	901,643
1916	98,171,275	5,131,582
1917	162,734,010	11,410,606
1918	336,999,646	32,836,084
1919	244,104,805	28,878,540
1920	196,108,919	25,280,065
1921	49,843,640	3,991,747
1922	3,804,130	182,975
1923	22,818,945	2,017,517
1924	18,714,151	1,323,866
1925	16,064,064	1,247,116
1926	15,649,822	1,151,424
1927	19,183,463	1,336,606

Oil, Spike Lavender

	Pounds.	Dollars.
1927	103,446	104,055

Oil, Stearin, Palm, Etc., for Candle Makers' Use

	Pounds.	Dollars.
1924	872,344	18,432
1925	81,448	4,961
1926	5,617	221
1927	76,613	3,072

Imports Into the United States

Oil, Thyme

	Pounds.	Dollars.
1871	725	737
1881	30,401	16,023
1891	49,487	20,549
1901	37,634	29,729
1913	138,972	105,296
1914	89,148	63,864
1915	99,580	88,498
1916	92,097	85,913
1917	91,163	90,868
1918	206,185	242,254
1919	98,324	135,914
1920	102,973	179,370
1921	81,327	116,595
1922	156,906	206,626
1923	134,366	173,455
1924	168,954	144,631
1925	92,411	65,008
1926	80,766	62,488
1927	97,370	59,630

Oil, Valerian

	Pounds.	Dollars.
1871	71	283
1881	117	690
1891	.....	.....
1901	61	148
1913	40	124
1914	6	12
1915	15	36
1916	.....	.....
1917	.....	.....
1918	366	3,690
1919	.....	.....
1920	57	323
1921	.....	.....
1922	40	110
1922	40	110
1923	1,118	3,257
1924	25	111
1925	54	612
1926	70	396
1927	10	52

Oil, Vetiver

	Pounds.	Dollars.
1927	2,581	22,291

Oil, Whale

	Gallons.	Dollars.
1871	146,797	82,758
1881	65,100	22,915
1891	51,005	14,813
1901	1,322	311
1913	1,166,339	278,208
*1914	82,756	26,553

* July 1 to October 3, 1913. Stated separately after October 3, 1923. Includes Sperm Oil Prior to October 3, 1913.

Oil, Whale, Sperm

	Gallons.	Dollars.
1914	157,142	66,652
1915	92,033	38,612
1916	59,816	25,191
1917	48,178	37,512
1918	60,328	70,229
7919	99,347	120,416
1920	124,183	102,128
1921	1,739	637
1922	24,720	13,594
1923	149,108	50,225
1924	32,896	17,922
1925	103,306	51,067
1926	314,099	117,527
1927	178,278	59,369

Oil, Whale, All Other

	Gallons.	Dollars.
1914	290,745	94,424
1915	604,503	215,644
1916	230,762	79,569
1917	415,163	234,097
1918	1,134,021	574,907
1919	156,915	133,998
1920	508,770	625,590
1921	308,917	113,120
1922	4,298,822	2,520,265
1923	3,587,883	1,895,666
1924	4,709,013	2,301,760
1925	6,838,206	4,036,813
1926	3,508,307	1,835,382
1927	6,059,409	2,847,296

Oils and Fats, Hydrogenated or Hardened

	Pounds.	Dollars.
1926	91,420	14,484
1927	213,938	34,615

Oleo Stearin

	Pounds.	Dollars
1913	9,540,347	967,000
1914	5,679,535	497,973
1915	2,644,460	226,661
1916	910,478	81,280
1917	1,113,277	114,640
1918	6,575,379	1,118,413
1919	1,601,574	314,308
1920	1,307,847	274,545
1921	842,908	92,279
1922	378,222	32,596
1926	40,158	3,955
1924	200,308	20,439
1925	1,629,959	167,390
1926	1,273,746	137,631
1927	1,031,464	118,865

Opium, Aqueous Extract of, and Tinctures of, as Laudanum, Etc.

	Ounces.	Dollars.
1891	.....	219
1901	.....	660
1913	.....	671
1914	.....	5,279
1915	.....	5,565
1916	.....	6
1917	.....	222
1918	.....	.....
1919	.....	70
1920	.....	46
1921	.....	976
1922	.....	1,216
1923	.....	1,027

No imports allowed after 1923.

Opium, Containing 8.5% and Over of Anhydrous Morphine, Crude

	Pounds.	Dollars.
1871	158,620	918,974
1881	335,059	1,791,415
1891	621,749	1,582,461
1901	491,448	1,080,209
1913	441,277	2,130,154
1914	441,621	1,731,589
1915	353,006	1,699,217
1916	117,870	533,183
1917	43,016	330,652
1918	21,341	265,283
1919	74,264	977,596
1920	420,976	4,539,465
1921	78,842	428,188
1922	149,140	408,993
1923	113,780	365,441
1924	79,722	398,700
1925	91,055	805,777
1926	104,414	673,467
1927	148,239	1,013,704

Opium, Dried

	Pounds.	Dollars
1871	37,825	353,334
1881	76,446	761,349
1891	61,341	453,369
1901	139,519	1,141,518
1913	49,071	389,864
1914	32,095	205,684
1915	38,977	308,928
1916	44,052	243,790
1917	77,990	640,563
1918	98,498	1,514,127
1919	101,998	1,776,787
1920	1,672	14,433
1921	149	436
1922	1,525	5,869
1923	1,690	9,177

No imports allowed after 1923.

Opium, All Other Alkaloids and Salts and Esters

	Ounces.	Dollars.
1871	.....	89
1881	97	15
1891	.....	.....
1901	.....	.....
1913	9,672	28,587
1914	11,593	64,528
1915	8,626	49,584
1916	2,360	9,981
1917	34,179	165,028
1918	20,479	126,882
1919	56,895	318,361
1920	28,793	155,979
1921	573	1,315
1922	4,625	17,646
1923	200	981

No imports allowed after 1923.

Orange Mineral

	Pounds.	Dollars.
1891	1,827,569	87,405
1901	869,251	50,587
1913	287,535	18,595
1914	362,963	24,692
1915	166,202	12,279
1916	108,275	10,589
1917	54,834	7,852
1918	9,506	1,407
1919	.....	.....
1920	62,534	6,147
1921	99,340	10,987
1922	66,727	5,901
1923	134,105	10,680
1924	86,677	6,587
1925	83,709	8,109
1926	40,143	4,037
1927	68,967	5,536

Orchil, or Orchil Liquid

	Pounds.	Dollars.
1871	.....	3,942
1881	.....	.....
1891	.....	81,974
1901	.....	31,937
1913	.....	27,386
1914	.....	21,569
1915	.....	37,802
1916	.....	114,603
1917	.....	98,905
1918	.....	55,612
1919	259,124	30,651
1920	634,570	63,380
1921	520,275	77,409
1922	424,398	56,030

Included in "Cudbear, etc.," after 1922.

Orris, or Iris

	Pounds.	Dollars.
1881	108,132	11,199
1891	230,448	25,376
1901	301,220	15,605
1913	357,963	37,326
1914	580,484	71,941
1915	554,125	52,893
1916	602,289	62,552
1917	527,539	61,494
1918	465,960	55,728
1919	406,273	68,956
1920	1,334,628	146,921
1921	235,522	17,602
1922	559,352	25,725
1923	585,905	29,760
1924	638,767	27,426
1925	540,549	30,546
1926	570,260	34,106
1927	546,656	32,391

Osmiridium

	Ounces, troy.	Dollars.
1914	666	43,659
1915	911	58,014
1916	302	9,654
1917	333	24,293
1918	158	16,015
1919	809	77,347
1920	2,814	302,070
1921	3,619	365,245
1922	2,735	273,401
1923	1,383	171,091
1924	1,416	177,284
1925	2,557	324,371
1926	4,293	634,779
1927	6,290	373,897

Osmium

	Ounces, troy.	Dollars.
1919	1,957	119,328
1920	624	29,021
1921	351	23,275
1922	608	46,153
1923	1,037	104,127
1924	1,151	110,111
1925	877	99,141
1926	877	85,498
1927	267	21,084

Oxgall, Bile Salts and Bile Compounds

	Pounds.	Dollars
1924	299	469
1925	209	511
1926	98	289
1927	.....	.....

Paint, Metallic, Iron Oxide and Iron Hydroxide Pigments

	Pounds.	Dollars.
1924	22,908,117	584,853
1925	26,516,612	624,259
1926	26,281,730	658,101
1927	26,348,690	638,511

Paints, Enamel

	Pounds.	Dollars.
1913	59,457	11,877
1914	96,174	17,316
1915	86,078	6,504
1916	54,546	8,987
1917	118,571	13,902
1918	2,470	336
1919	1,908	2,641
1920	22,848	11,540
1921	52,009	20,244
1922	57,795	17,249
1923	49,836	12,408
1924	151,941	32,481
1925	115,358	21,046
1926	140,239	27,990
1927	251,212	43,176

Palladium

	Ounces, troy.	Dollars.
1901	.....	1,455
1914	5,986	169,171
1915	40	2,779
1916	8,011	304,559
1917	1,663	95,331
1918	1,317	148,938
1919	2,020	77,642
1920	6,518	599,471
1921	5,817	424,472
1922	12,165	639,976
1923	12,339	697,854
1924	12,918	768,514
1925	8,161	487,445
1926	8,412	495,597
1927	5,691	309,252

Palm and Palm Nut Kernels

	Pounds.	Dollars.
1881	.....	819
1891	.....	1,273
1901	.....	.....
1913	.....	4,872
1914	.....	23,127
1915	.....	31,900
1916	.....	1,104,885
1917	.....	626,435
1918	.....	338,778
1919	19,590,551	539,708
1920	6,758,218	420,949
1921	4,545,057	217,080
1922	302,776	20,106
1923	797,896	58,370
1924	30,030	4,382
1925	46,088	6,247
1926	207,364	17,612
1927	266,072	23,437

Paprika, Unground

	Pounds.	Dollars.
1925	110,121	14,827
1926	137,346	20,068
1927	17,903	3,437

Paprika, Ground

	Pounds.	Dollars.
1925	2,258,109	348,641
1926	4,281,510	730,374
1927	4,761,719	1,054,373

Paracetaldehyde or Paraldehyde

	Pounds.	Dollars.
1924	463,720	81,119
1925	787,928	137,429
1926	494,223	71,329
1927	27,262	5,124

Paraffin and Paraffin Wax

(Not including oil.)

	Pounds.	Dollars.
1891	62,439	4,880
1901	263,251	13,484
1913	11,521,205	503,802
1914	7,501,463	327,402
1915	5,628,811	254,389
1916	8,526,929	418,362
1917	10,641,404	654,186
1918	8,881,023	656,474
1919	6,600,404	754,351
1920	8,687,728	820,299
1921	5,714,653	630,575
1922	5,654,930	230,862
1923	11,935,679	476,184
1924	9,959,264	484,501
1925	16,554,535	950,253
1926	9,572,545	668,229
1927	12,607,931	819,539

Paraformaldehyde or Solid Formaldehyde

	Pounds.	Dollars.
1925	34,816	5,920
1926	5	10
1927	500	141

Paris Green and London Purple

	Pounds.	Dollars.
1901	311,753	6,229
1913	165,820	7,692
1914	33,373	3,572
1915	16,800	2,975
1916	31,917	8,163
1917	.....	.....
1918	48	189
1919	18	14
1920	.....	.....
1921	992	372
1922	1,787	316
1923	102,429	20,912
1924	74,577	15,268
1925	2,595	771
1926	7,230	1,478
1927	22	6

Papaw Juice or Crude Papain

	Pounds.	Dollars.
1927	25,533	90,365

Peanuts, Unshelled

	Pounds.	Dollars.
1871	5,139,877	128,318
1881	40,333	724
1891	304,335	6,553
1901	738,718	18,762
1913	12,140,612	459,003
1914	17,308,778	655,448
1915	15,075,387	480,693
1916	9,623,411	353,790
1917	7,710,082	330,769
1918	3,096,678	152,313
1919	1,304,409	92,291
1920	9,786,996	792,634
1921	5,968,952	466,224
1922	2,584,829	139,223
1923	4,177,730	178,142
1924	2,861,407	123,295
1925	8,296,607	373,373
1926	4,869,543	245,158
1927	3,755,929	157,189

Peanuts, Shelled

	Pounds.	Dollars.
1871	720,982	25,560
1881	5,751	432
1891	148,350	18,318
1901	55,621	1,938
1913	7,823,173	428,188
1914	21,819,101	987,499
1915	11,696,507	445,143
1916	19,739,888	740,276
1917	27,548,928	1,200,308
1918	70,947,036	4,358,197
1919	15,855,266	1,086,115
1920	102,285,543	9,534,498
1921	56,137,230	3,543,412
1922	5,748,982	259,432
1923	27,350,932	1,367,598
1924	43,891,845	2,057,694
1925	65,265,489	3,163,697
1926	36,570,573	1,860,643
1927	39,174,857	1,793,904

Pepper, Black and White, Unground

	Pounds.	Dollars.
1871	6,895,551	485,635
1881	8,661,633	741,119
1891	13,871,442	1,372,818
1901	15,022,896	1,752,167
1913	27,568,317	2,855,184
1914	21,809,875	2,179,995
1915	26,620,992	2,685,522
1916	32,174,546	3,789,466
1917	26,586,256	4,035,410
1918	32,132,953	4,928,582
1919	22,493,585	3,590,072
1920	27,736,965	4,693,669
1921	24,593,628	2,819,661
1922	25,855,510	2,532,304
1923	30,367,210	2,206,657

Stated separately after 1923.

Pepper, Black, Unground

	Pounds.	Dollars.
1924	21,217,723	1,479,336
1925	27,191,384	2,399,470
1926	22,986,475	3,466,491
1927	18,289,315	3,642,706

Pepper, White, Unground

	Pounds.	Dollars.
1924	4,631,121	519,978
1925	6,063,512	939,633
1926	4,902,747	1,125,511
1927	4,440,197	1,551,887

Pepper, Capsicum, Red or Cayenne (Including Chili), Unground

	Pounds.	Dollars.
1871	140,936	9,241
1881	66,834	8,414
1891	2,302,326	123,092
1901	2,038,797	143,137
1914	6,522,463	711,966
1915	3,093,232	332,616
1916	4,354,041	477,044
1917	4,734,381	47,343
1918	2,712,857	315,481
1919	1,950,920	226,294
1920	2,758,607	379,228
1921	2,683,311	391,199
1922	2,389,769	315,333
1923	6,032,003	703,889
1924	4,380,308	672,838
1925	3,181,060	410,010
1926	2,467,666	273,284
1927	2,418,298	274,355

Pepper, Capsicum, Red or Cayenne, Ground

	Pounds.	Dollars.
1871	1,376	603
1881	25,353	3,829
1891	.....	.....
1901	.....	.....
1914	1,322,308	165,807
1915	1,827,606	207,379
1916	2,265,154	271,244
1917	3,636,876	455,897
1918	1,891,744	280,071
1919	2,112,371	626,188
1920	2,399,677	941,418
1921	2,537,883	624,078
1922	3,211,432	471,426
1923	3,896,586	560,298
1924	3,268,056	561,530
1925	2,064,956	354,332
1926	220,719	36,662
1927	15,541	3,200

Pepsin and Other Enzyme Preparations, Medicinal, N. E. S.

	Pounds.	Dollars.
1924	2,304	338
1925	354	1,604
1926	18	9
1927	220	597

Perfumery, Etc., Containing Alcohol

	Pounds.	Dollars.
1871	.....	272,302
1881	.....	461,592
1891	.....	258,832
1901	.....	594,282
1913	286,025	819,685
1914	301,443	771,758
1915	240,075	689,930
1916	281,387	828,727
1917	359,200	1,085,369
1918	267,733	1,014,647
1919	221,041	911,014
1920	1,620,601	3,533,172
1921	1,774,025	3,639,951
1922	566,365	2,339,280
1923	635,812	3,036,899
1934	374,176	1,542,201
1925	305,732	1,597,512
1926	388,436	1,553,652
1927	320,671	1,515,960

Perfumery, Etc., Not Containing Alcohol

	Pounds.	Dollars.
1922	1,556,411	2,149,714
1923	1,479,368	1,903,144
1924	536,112	484,112
1925	665,050	475,955
1926	566,118	293,494
1927	841,568	443,892

Persian Berry Extract

	Pounds.	Dollars.
1881	.....	.....
1891	.....	1,702
1901	.....	511
1913	64,883	7,173
1914	115,336	12,924
1915	92,876	12,245
1916	17,353	4,227
1917	8,507	1,837
1918	.....	.....
1919	.....	.....
1920	17,166	6,322
1921	.....	.....
1922	21,217	4,042
1923	15,322	2,634
1924	16,907	2,299
1925	12,994	1,849
1926	15,636	2,248
1927	29,063	4,194

Phenolphthalein

	Pounds.	Dollars.
1914	14,076	14,090
1915	49,326	46,295
1916	11,432	9,740
1917	3,576	7,794
1918	.....	.....
1919	100	1,200
1920	200	726
1921	.....	.....
1922	5,129	2,421
1923	3,148	17,917
1924	1,270	1,791
1925	970	3,861
1926	1,488	1,910
1927	496	645

Imports Into the United States

Phenylenediamine, Phenylglycine, Etc.

	Pounds.	Dollars.
1919	2,246	1,225
1920	2,929	2,431
1921	.....	.....
1922	.....	.....
1923	6	16
1924	.....	.....
1925	.....	.....
1926	2,475	2,559
1927	15,258	17,318

Phosphate Materials, Crude, N. E. S.

	Tons.	Dollars.
1871	.....	165,703
1881	.....	918,835
1891	32,883	287,057
1901	23,535	152,780
1914	25,551	177,838
1915	2,601	26,982
1916	8,190	69,820
1917	96	1,420
1918	6	60
1919	32	323
1920	54	1,681
1921	541	9,725
1922	3,945	63,150
1923	10,729	153,410
1924	1,714	36,274
1925	6,154	129,469
1926	4,165	81,437
1927	10,389	158,423

Phosphate Rock, Crude

	Tons.	Dollars.
1924	17,084	202,165
1925	8,472	101,696
1926	8,096	103,175
1927	20,529	255,164

Phosphorus

	Pounds.	Dollars.
1871	.....	32,872
1881	.....	52,113
1891	151,166	53,590
1901	39,315	15,125
1914	605	264
1915	612	251
1916	.....	.....
1917	4,010	2,306
1918	88,692	57,572
1919	564,043	205,507
1920	99,806	23,462
1921	861,332	70,644
1922	648,135	86,884
1923	488,855	62,319
1924	167,251	44,278
1925	120,091	44,842
1926	146,717	55,102
1927	136,879	52,095

Photographic Chemicals (Coal Tar)

	Pounds.	Dollars.
1917	11,322	103,580
1918	11,492	80,863
1919	14,261	99,318
1920	15,477	72,109
1921	30,727	80,632
1922	11,650	25,917
1923	17,371	29,470
1924	5,211	16,475
1925	6,958	21,728
1926	12,343	38,302
1927	26,796	68,101

Pigments, Black (Except Mineral Earth), Dry or Ground in Oil or Water, N. E. S.

	Pounds.	Dollars.
1925	465,157	8,094
1926	1,118,396	22,174
1927	1,292,904	36,274

Pigments, Mineral Earths, Crude, N. E. S.

	Pounds.	Dollars.
1925	252,713	9,673
1926	172,826	5,296
1927	257,383	3,998

Pimento (Allspice), Unground

	Pounds.	Dollars.
1871	1,386,542	55,289
1881	1,774,344	159,960
1891	1,195,270	49,326
1901	4,254,196	208,793
1913	7,212,100	259,508
1914	1,517,971	54,506
1915	1,330,158	36,769
1916	1,355,575	46,241
1917	3,277,578	118,401
1918	4,064,556	152,847
1919	1,193,629	54,677
1920	4,064,481	314,583
1921	3,325,870	176,718
1922	4,345,769	131,117
1923	3,773,833	107,054
1924	3,394,631	106,728
1925	3,270,110	153,878
1926	2,890,134	292,076
1927	2,840,258	360,208

Pitch, Burgundy

	Pounds.	Dollars.
1881	58,285	1,554
1891	212,627	3,520
1901	171,771	3,650
1913	977,629	43,799
1914	1,055,327	40,480
1915	131,967	4,051
1916	14,756	673
1917	25	3
1918	100	12
1919	.....	.....
1920	.....	.....
1921	3,776	476
1922	47,191	6,532
1923	61,400	3,321
1924	105,627	5,263
1925	255,695	12,737
1926	72,789	5,156
1927	105,460	8,700

Pitch, Marine Glue

	Pounds.	Dollars.
1913	303,186	14,392
1914	317,506	15,154
1915	56,532	3,807
1916	481,633	20,496
1917	327,311	18,447
1918	276,702	18,860
1919	164,348	11,287
1920	173,336	11,194
1921	230,177	15,188
1922	89,975	9,431
1923	446,318	20,766
1924	589,516	25,552
1925	585,147	36,898
1926	303,457	21,408
1927	216,188	17,955

Plaster Rock or Gypsum, Crude

	Tons.	Dollars.
1871	112,900	88,256
1881	144,682	128,107
1891	167,606	176,588
1901	197,144	213,317
1913	386,927	462,889
1914	417,580	482,320
1915	260,161	316,308
1916	306,757	372,308
1917	230,392	276,952
1918	141,106	176,959
1919	69,538	92,548
1920	191,913	282,601
1921	234,719	359,027
1922	295,593	454,192
1923	350,509	497,339
1924	477,289	750,203
1925	421,178	681,590
1926	652,082	1,154,570
1927	741,680	1,178,088

Plaster Rock or Gypsum, Ground or Calcined

	Tons.	Dollars.
1871	.....	64,465
1881	.....	24,915
1891	9,243	86,809
1901	2,520	15,606
1913	3,910	26,228
1914	4,292	30,225
1915	3,943	30,333
1916	6,494	36,322
1917	12,321	107,999
1918	11,828	79,335
1919	7,416	106,131
1920	7,536	110,353
1921	11,954	151,752
922	3,617	51,591
923	2,088	45,463

Stated separately after 1923.

Plaster Rock or Gypsum, Ground

	Tons.	Dollars.
1924	1,887	22,163
1925	1,275	18,936
1926	3,343	48,721
1927	2,203	31,034

Plaster Rock or Gypsum, Calcined or Plaster of Paris

	Tons.	Dollars.
1924	3,278	58,021
1925	5,424	85,825
1926	5,190	69,292
1927	5,822	89,818

Plasters, Healing, or Curative, and Court Plaster.

	Pounds.	Dollars.
1913	.....	4,639
1914	.....	10,929
1915	.....	7,171
1916	.....	8,094
1917	.....	7,871
1918	.....	5,591
1919	.....	7,278
1920	.....	9,244
1921	.....	12,595
1922	.....	6,972
1923	.....	13,571
1924	6,345	10,065
1925	9,804	13,493
1926	7,294	10,608
1927	8,549	12,744

Plumbago or Graphite

	Tons.	Dollars.
1871	2,904	136,200
1881	8,489	381,966
1891	10,126	509,719
1901	13,110	930,002
1913	25,233	1,972,177
1914	24,866	1,846,074
1915	17,057	1,387,873
1916	30,938	4,298,530
1917	42,270	9,678,160
1918	25,440	6,018,662
1919	18,670	2,222,519
1920	20,924	2,345,302
1921	14,797	1,160,054
1922	6,279	345,815
1923	15,936	543,567

Stated separately after 1923.

Plumbago or Graphite, Amorphous

	Pounds.	Dollars.
1924	26,053,208	152,320
1925	16,860,716	119,844
1926	16,931,791	147,093
1927	18,860,269	157,663

Plumbago or Graphite, Crystalline Lump, Chip or Dust

	Pounds.	Dollars.
1924	11,951,651	326,782
1925	9,023,207	237,920
1926	12,891,839	503,539
1927	10,750,977	376,367

Plumbago or Graphite, Crystalline Flake

	Pounds.	Dollars.
1924	3,123,636	79,678
1925	2,817,127	126,783
1926	7,222,180	427,866
1927	3,805,559	208,201

Polishing and Cleaning Creams, Except Blanco Polish

	Pounds.	Dollars.
1891	.....	42,971
1901	.....	.....
1914	.....	6,085
1915	.....	11,600
1916	.....	14,133
1917	.....	7,208
1918	.....	22,879
1919	.....	18,402
1920	.....	15,082
1921	.....	26,235
1922	.....	11,845
1923	.....	34,600
1924	158,290	34,684
1925	164,329	37,637
1926	163,949	34,517
1927	199,384	37,141

Potash-bearing Dusts Used for Fertilizers

	Tons.	Dollars.
1924	6	220
1925	1	16
1926	202	5,932
1927	25	178

Potash Bicarbonate

	Pounds.	Dollars.
1871	170,823	10,550
1881	798,585	39,214
1891	76,828	4,344
1901	73,770	5,054
1913	311,645	14,295
1914	478,853	22,767
1915	383,534	20,341
1916	2,062	614
1918	171,528	84,881
1919	87,946	25,119
1920	5,008	1,200
1917	10,053	5,271
1921	594,287	116,491
1922	381,605	19,898
1923	703,325	38,396
1924	253,524	17,297
1925	387,064	25,353
1926	327,759	20,491
1927	633,808	36,075

Potash Bitartrate

(See Argols, etc.)

Potash Bromide

	Pounds.	Dollars.
1924	131,222	10,199
1925	992,244	162,465
1926	78,335	19,759
1927	58,816	16,672

Potash Carbonate, Crude

	Pounds.	Dollars.
1901	18,888,612	627,601
1913	10,063,912	295,066
1914	9,046,302	240,451
1915	8,620,504	291,341
1916	444,241	27,689
1917	1,069,408	185,910
1918	9,183,741	2,928,288
1919	1,092,792	373,745
1920	15,916,283	301,541
1921	3,515,339	369,699
1922	4,097,490	176,742

Not stated after 1922.

Potash Carbonate, Refined

	Pounds.	Dollars.
1891	7,241,909	259,537
1901	3,448,349	112,783
1913	14,035,111	412,587
1914	10,421,005	368,958
1915	2,377,940	92,959
1916	174,587	38,604
1917	202,885	53,170
1918	445,282	124,019
1919	130,040	40,980
1920	1,318,531	144,407
1921	577,275	162,235
1922	266,527	16,455

Not stated after 1922.

Potash Carbonate

	Pounds.	Dollars.
1923	9,463,806	503,252
1924	7,124,979	324,459
1925	8,133,313	341,975
1926	10,194,271	457,334
1927	13,139,340	691,176

Potash, Caustic or Hydrate, Unrefined

	Pounds.	Dollars.
1901	3,840,777	180,277
1912	8,422,007	330,684
1913	8,994,449	348,501
1914	8,565,451	326,650

Not stated after 1922.

Potash, Caustic or Hydrate, Refined

	Pounds.	Dollars.
1901	86,798	7,195
1912	77,184	8,097
1913	112,822	11,920
1914	18,751	1,977

Not stated after 1922.

Potash Chlorate and Perchlorate

	Pounds.	Dollars.
1871	395,068	85,315
1881	1,086,781	150,444
1891	3,361,838	341,661
1901	1,103,379	67,383
1913	1,235,732	66,609
1914	40,319	3,408
1915	27,419	4,614
1916	.....	.....
1917	437,339	194,008
1918	1,029,980	610,702
1919	315,565	113,498
1920	698,385	87,205
1921	2,000,124	179,563
1922	3,806,221	327,539
1923	9,040,975	439,730
1924	10,119,771	421,465
1925	9,834,711	406,554
1926	6,242,161	245,723

Stated separately after 1926.

Potash Chlorare

	Pounds.	Dollars.
1927	13,257,379	472,914

Potash Perchlorate

	Pounds.	Dollars.
1927	279,085	20,816

Potash Chromate and Bichromate

	Pounds.	Dollars.
1871	2,170,473	223,529
1881	4,404,237	402,088
1891	1,234,085	95,261
1901	260,519	14,401
1913	27,671	2,601
1914	34,860	2,822
1915	40,227	3,317
1916	2,291	391
1917	2,404	962
1918	20	8
1919	.....	.....
1920	19,864	6,961
1921	331	89
1922	74,850	7,052
1923	8,301	1,716
1924	8,862	1,631
1925	7,950	1,402
1926	6,107	1,092
1927	7,756	1,321

Potash, Crude, or Black Salts

	Pounds.	Dollars.
1881	.....	1,227
1891	.....	.....
1901	.....	.....
1914	2,599,883	52,454
1915	4,076,783	83,502
1916	1,504,149	53,752
1917	2,819,235	233,111
1918	727,588	112,235
1919	268,441	12,814
1920	4,912,740	144,317
1921	10,681,304	309,080
1922	3,642,249	84,884

Not stated after 1922.

Potash Cyanide

	Pounds.	Dollars.
1901	2,029,993	475,833
1913	950,890	187,535
1914	1,236,799	183,259
1915	747,627	143,331
1916	43,705	9,311
1917	70,147	49,513
1918	13,455	3,150
1919	444,581	32,161
1920	5,175,608	430,873
1921	13,353,271	977,664
1922	2,007,752	175,019
1923	3,019,859	243,809
1924	2,577,901	205,552
1925	1,149,928	111,112
1926	1,910,319	197,680
1927	100,450	36,678

Potash Hydroxide (Caustic)

	Pounds.	Dollars.
1891	1,891,607	85,535
1915	4,993,471	225,09??
1916	39,770	9,222
1917	74,780	33,648
1918	11,732	4,398
1919	466,620	124,563
1920	782,477	220,163
1921	4,934,697	474,479
1922	15,079,586	685,716
1923	11,103,132	692,835
1924	11,210,695	647,320
1925	12,706,761	740,075
1926	13,081,524	774,769
1927	13,659,460	812,537

See "Potash, Caustic, Etc.," for 1912, 1913 and 1914.

Potash Iodide

	Pounds.	Dollars.
1871	17,842	49,503
1881	480	1,267
1891	1,024	935
1901	663	1,328
1913	120	239
1914	270	491
1915	4	13
1916	309	1,032
1917	24,357	58,752
1918	65,992	133,611
1919	25,963	74,834
1920	11,377	34,766
1921	890	2,435
1922	.....	.....
1923	14	92
1924	34	137
1925	63	253
1926	7	33
1927	10	75

Potash Muriate, Crude

	Tons.	Dollars.
1871	.....	61,270
1881	11,401	335,799
1891	37,927	1,182,007
1901	69,281	2,083,641
1913	223,887	6,737,757
1914	234,856	7,925,781
1915	102,882	3,660,353
1916	2,126	460,888
1917	606	174,806
1918	596	166,979
1919	1,677	201,307
1920	110,324	11,038,173
1921	49,911	5,290,196
1922	131,423	5,549,580
1923	149,372	4,694,569
1924	119,605	3,828,891
1925	154,772	4,767,146
1926	181,015	5,801,061
1927	162,831	5,252,086

Potash Nitrate, Crude

(See Saltpeter, Crude.)

Potash Nitrate, Refined

	*Pounds.	Dollars.
1871	67	7,820
1881	162	19,535
1891	79	6,194
1901	216	18,433
1913	197	22,142
1914	168	20,173
1915	34	4,222
1916	2	749
1917	288	35,143
1918	43	16,193
1919	1	96
1920	103	20,658
1921	14,444	107,649
1922	683	48,558
1923	1,974	554,097
1924	4,370,193	192,437
1925	8,208,966	331,842
1926	9,414,892	484,007
1927	8,479,211	372,691

* Quantity stated in tons prior to 1924.

Potash Permanganate

	Pounds.	Dollars.
1871	2,735,769	112,521
1881	.....	.....
1891	.....	.....
1901	.....	.....
1913	357,366	25,814
1914	1,351,855	91,065
1915	1,039,304	78,224
1916	214,291	57,306
1917	6,946	11,727
1918	43,826	106,104
1919	18,107	43,830
1920	9,446	5,100
1921	104,041	47,984
1922	856,067	109,085
1923	922,791	116,996
1924	536,001	63,226
1925	164,313	13,964
1926	42,558	4,068
1927	347,799	29,669

Potash Prussiate, Red (Ferricyanide)

	Pounds.	Dollars.
1871	17,480	7,222
1881	106,424	49,685
1891	35,826	10,650
1901	30,262	7,357
1913	65,316	11,802
1914	89,976	15,325
1915	88,574	14,922
1916	2,560	3,520
1917	4,523	10,425
1918	9,824	18,496
1919	13,992	25,497
1920	87,506	52,483
1921	66,004	30,232
1922	39,716	15,121
1923	114,142	75,850
1924	71,585	29,705
1925	115,666	52,498
1926	108,015	50,390
1927	107,593	46,444

Imports Into the United States

Potash Prussiate, Yellow (Ferrocyanide)

	Pounds.	Dollars.
1871	255,325	58,009
1881	544,167	108,954
1891	2,223,154	368,366
1901	1,609,358	218,908
1913	2,812,408	309,302
1914	3,508,228	390,021
1915	2,316,736	255,711
1916	44,156	31,051
1917	41,128	32,251
1918	134,638	111,096
1919	58,003	45,869
1920	1,141,224	188,797
1921	398,961	99,211
1922	515,633	109,228
1923	603,272	150,122
1924	331,335	52,237
1925	238,643	31,337
1926	182,685	20,875
1927	167,589	22,208

Potash Sulphate, Crude

	Tons.	Dollars.
1891	1,362	49,619
1901	15,632	558,136
1913	48,023	1,798,369
1914	44,986	1,887,491
1915	21,705	1,071,623
1916	2,427	197,808
1917	656	20,538
1918	136	19,837
1919	137	23,304
1920	6,356	1,073,322
1921	12,081	1,660,798
1922	45,280	2,085,348
1923	51,885	2,118,979
1924	68,354	2,682,881
1925	67,331	2,554,808
1926	61,465	2,400,174
1927	70,534	2,871,368

Potash Salts, Not Elsewhere Specified

	Pounds.	Dollars.
1924	89,666	4,321
1925	59,406	4,345
1926	88,077	9,923
1927	201,436	29,306

Potassium Aluminum Sulphate or Potash Alum

	Pounds.	Dollars.
1924	2,566,611	56,063
1925	3,387,875	57,740
1926	3,362,640	59,181
1927	2,755,804	44,979

Potassium

	Pounds.	Dollars.
1921	15,227	581
1922	42,869	3,643
1923	4,013	740
1924	103	52
1925	.....	.....
1926	.....	.....
1927	.....	.....

Potassium and Sodium Tartrate (Rochelle Salt)

	Pounds.	Dollars.
1871	100	27
1881	33	9
1891	547	100
1901	272	33
1914	186,305	23,419
1915	253,609	19,244
1916	187	47
1917	17,840	4,352
1918	31,160	8,614
1919	6,742	2,966
1920	69,440	17,580
1921	246,698	48,614
1922	472,626	67,496
1923	327,778	48,918
1924	305,064	37,507
1925	372,468	40,890
1926	271,674	31,118
1927	264,544	31,703

Press Cloth for Oil Milling Purposes

	Pounds.	Dollars.
1920	8,502	9,225
1921	11,532	13,643
1922	8,401	6,559
1923	32,560	40,372
1924	120,464	46,612
1925	195,323	66,270
1926	166,582	74,517
1927	299,048	131,302

Propylene Chlorohydrin, Dichloride, and Glycol

	Pounds.	Dollars.
1926	231	311
1927	4,409	594

Putty (Whiting, Ground in Oil)

	Pounds.	Dollars.
1871	5,534	118
1881	287	28
1891	122	14
1901	15,362	378
1913	36,434	881
1914	37,029	911
1915	18,078	343
1916	16,082	386
1917	337,286	1,472
1918	36,398	3,781
1919	4,735	811
1920	96,572	4,717
1921	393,136	12,420
1922	744,495	13,947
1923	671,458	18,519
1924	156,156	5,180
1925	316,662	14,175
1926	165,888	4,770
1927	223,765	3,991

Pyrethrum or Insecticide Flowers, Crude

	Pounds.	Dollars.
1918	2,298,476	422,751
1919	3,399,026	667,374
1920	6,827,700	2,672,576
1921	3,958,657	1,749,213
1922	2,600,093	789,988
1923	3,962,222	1,742,108
1924	2,950,269	1,316,503
1925	3,812,093	1,022,043
1926	8,945,124	1,344,645
1927	10,472,479	1,271,335

Pyrethrum or Insecticide Flowers, Advanced in Value

	Pounds.	Dollars.
1924	162,880	60,702
1925	44,385	16,305
1926	4,495	1,074
1927	34,419	7,413

Pyridin and Quinolin

	Pounds.	Dollars.
1918	11,981	1,051
1919	123,049	15,248
1920	493,383	56,604
1921	434,668	121,437
1922	148,911	22,075
1923	363,762	92,398

Stated separately after 1923.

Pyridin

	Pounds.	Dollars.
1924	641,689	278,254
1925	691,791	303,353
1926	964,935	483,803
1927	418,359	181,106

Pyroxylin Compounds, or Other Cellulose Esters

		Dollars.
1881	.....	2
1891	.....	11,755
1901	.....	725
1913	.....	288,639
1914	.....	583,391
1915	.....	371,714
1916	.....	127,627
1917	.....	53,693
1918	.....	53,054
1919	.....	43,172
1920	.....	77,673
1921	.....	155,536
1922	.....	36,069
1923	.....	629,972
1924	.....	1,748,420
1925	.....	1,469,323
1926	.....	2,306,646
1927	.....	2,800,443

Quassia

	Pounds.	Dollars.
1924	894,250	5,799
1925	443,319	3,801
1926	1,286,773	12,182
1927	688,972	8,561

Quebracho Extract

	Pounds.	Dollars.
1913	63,604,814	1,672,314
1914	99,605,839	2,699,104
1915	125,565,857	3,676,749
1916	81,501,892	5,432,458
1917	61,977,849	5,382,433
1918	101,523,282	4,917,212
1919	137,151,143	5,856,803
1920	154,944,717	8,123,641
1921	110,184,308	6,602,449
1922	134,274,423	5,205,641
1923	119,825,707	4,716,221
1924	118,919,280	3,546,774
1925	101,130,658	3,203,155
1926	115,758,079	3,980,893
1927	106,292,121	4,472,836

Quebracho Wood.

	Tons.	Dollars.
1913	101,869	1,300,126
1914	73,957	900,880
1915	54,715	750,873
1916	106,854	1,558,465
1917	95,211	1,096,946
1918	53,871	846,871
1919	2,689	31,048
1920	33,672	480,503
1921	32,901	531,566
1922	23,987	265,910
1923	42,297	556,354
1924	28,215	440,163
1925	22,645	354,596
1926	26,453	472,966
1927	44,724	698,674

Quicksilver or Mercury

	Pounds.	Dollars.
1871	239,223	107,646
1881	138,517	57,733
1891	457,056	254,837
1901	1,666	899
1913	380	387
1914	444,673	192,609
1915	581,924	292,244
1916	554,852	595,057
1917	242,526	239,401
1918	580,460	641,316
1919	319,074	338,595
1920	1,227,582	1,184,374
1921	728,105	616,517
1922	986,956	502,824
1923	1,506,632	900,823
1924	1,178,450	632,688
1925	1,120,970	754,842
1926	1,940,041	1,581,787
1927	1,795,242	1,832,599

Quicksilver Flasks, Bottles and Drums Used in Exporting Acids

	Number.	Dollars.
1913	.....	259,123
1914	.....	280,820
1915	.....	180,676
1916	.....	204,642
1917	.....	168,955
1918	.....	893,528
1919	.....	861,168
1920	.....	855,983
1921	.....	895,725
1922	.....	1,145,102
1923	.....	344,278
1924	.....	85,568
1925	.....	44,970
1926	.....	118,836
1927	13,234	173,215

Quinidine and Its Salts

	Ounces.	Dollars.
1924	415,011	20,985
1925	12,209	7,496
1926	126,740	38,470
1927	40,500	24,207

Quinine Alkaloid

	Ounces.	Dollars
1924	165,700	94,538
1925	163,000	80,541
1926	9,788	6,765
1927	279,390	153,243

Quinine, Crude

	Ounces.	Dollars.
1924	124,292	51,075
1925	406,536	204,599
1926	213,700	103,447
1927	.....	.....

Quinine Sulphate

	Ounces.	Dollars.
1871	10,861	12,261
1881	408,851	1,052,228
1891	3,079,000	803,729
1901	3,495,996	1,078,472
1913	2,279,734	397,406
1914	2,224,765	486,641
1915	1,508,931	378,511
1916	1,409,228	1,022,821
1917	623,947	324,438
1918	1,256,172	593,019
1919	2,101,006	1,238,125
1920	2,888,550	1,376,514
1921	1,935,531	1,489,166
1922	1,008,600	594,178
1923	2,926,988	1,176,808
1924	2,270,382	1,123,999
1925	1,482,360	650,901
1926	1,519,832	690,746
1927	1,804,914	687,831

Quinine, Other Salts and Derivatives

	Ounces.	Dollars
1924	271,306	134,491
1925	337,585	136,977
1926	122,828	62,232
1927	194,678	91,893

Radium Salts and Radio-active Substances

	Grains.	Dollars.
1914	.....	29,983
1915	.....	29,983
1916	.....	3,712
1917	.....	50
1918	.....	.....
1919	11	892
1920	12	11,033
1921	807	3,027
1922	913	15,719
1923	80	268,646
1924	116	417,758
1925	141	452,811
1926	126	306,470
1927	174	571,863

Red Lead

	Pounds.	Dollars.
1871	1,295,616	78,411
1881	212,423	10,009
1891	519,613	20,950
1901	524,935	23,933
1913	145,478	7,223
*1914	69,867	5,674
1915	6,697	342
1916	196	43
1917	20,471	5,296
1918	5	1
1919	7,184	1,134
1920	345	73
1921	22,772	1,720
1922	12,715	729
1923	1,110	72
1924	4,014	241
1925	2,860	232
1926	2,952	238
1927	28,828	2,496

* 29,940 pounds, $3,681, came in free of duty for construction and equipment of vessels.

Rennets

	Pounds.	Dollars.
1871	.....	254
1881	.....	34,261
1891	.....	90,042
1901	.....	90,812
1913	.....	129,588
1914	.....	129,720
1915	.....	106,614
1916	.....	86,694
1917	.....	13,.54
1918	.....	62,173
1919	40,905	97,964
1920	185,852	159,039
1921	122,968	72,092
1922	186,939	81,351
1923	287,201	75,176
1924	249,388	74,557
1925	171,623	63,643
1926	170,544	139,206
1927	137,127	109,904

Resorcinol, Medicinal

	Pounds.	Dollars.
1920	5,159	2,642
1921	156,028	112,312
1922	.....	.....
1923	6,720	8,390
1924	.....	.....
1925	14,525	18,824
1926	7,622	9,901
1927	6,340	13,390

Resorcinol, Not Medicinal

	Pounds.	Dollars.
1924	8,040	11,946
1925	7,770	10,490
1926	17,640	23,808
1927	18,869	24,359

Rochelle Salt

(See Potassium and Sodium Tartrate)

Rhubarb Root

	Pounds.	Dollars.
1881	163,519	42,607
1891	90,592	18,406
1901	216,803	20,766
1913	121,701	16,554
1914	181,240	22,354
1915	233,699	24,592
1916	155,924	17,701
1917	238,601	32,084
1918	190,962	20,879
1919	119,245	46,903
1920	283,138	234,757
1921	109,626	64,997
1922	125,212	44,088
1923	197,518	58,047
1924	174,087	48,736
1925	148,080	35,248
1926	125,663	32,074
1927	258,032	80,405

Rose Leaves

	Pounds.	Dollars.
1891	.....	6,966
1901	.....	1,678
1913	.....	67
1914	.....	1,434
1915	.....	484
1916	.....	1,060
1917	.....	4,199
1918	.....	4,164
1919	1,399	557
1920	25,827	10,566
1921	9,536	4,153
1922	7,255	2,606
1923	14,671	3,427
1924	12,706	3,871
1925	5,085	2,544
1926	33,602	7,311
1927	22,229	5,507

Rosin, Violin

	Pounds.	Dollars.
1871	.....	460
1881	.....	4,636
1891	.....	136
1901	.....	3,470
1913	.....	30,021
1914	.....	11,625
1915	.....	6,532
1916	.....	4,893
1917	.....	2,872
1918	.....	3,746
1919	.....	2,292
1920	.....	6,506
1921	.....	7,300
1922	.....	8,021
1923	.....	16,624
1924	27,823	16,256
1925	24,206	12,656
1926	33,861	17,077
1927	42,536	21,525

Saccharides

	Pounds.	Dollars.
1924	15,833	13,784
1925	15,775	20,138
1926	8,928	13,208
1927	18,070	22,660

Saccharin

	Pounds.	Dollars.
1901	29,334	35,784
1913	47	64
1914	8	30
1915	5,617	6,737
1916	12,954	76,789
1917	1,596	18,276
1918	1	48
1919	.....	.....
1920	.....	.....
1921	40	39
1922	46	118
1923	1	14
1924	.....	.....
1925	51	17
1926	.....	.....
1927	.....	.....

Saffron, Crude

	Pounds.	Dollars.
1927	5,242	90,051

Saffron, Safflower, and Saffron Cake Extract

	Pounds.	Dollars.
1871	.....	294
1881	.....	54,326
1891	.....	44,599
1901	.....	42,502
1913	.....	93,146
1914	.....	85,678
1915	.....	70,132
1916	.....	111,420
1917	.....	124,225
1918	.....	54,109
1919	16,459	77,273
1920	25,704	138,732
1921	22,969	67,454
1922	26,273	88,584
1923	16,215	63,506
1924	3,008	23,429
1925	5,077	14,016
1926	3,163	5,759
1927	1,371	2,254

Sage, Unground.

	Pounds.	Dollars.
1913	1,299,120	19,803
1914	2,005,469	39,309
1915	822,083	48,454
1916	1,865,815	130,464
1917	1,528,828	92,409
1918	1,364,295	150,004
1919	977,440	143,257
1920	1,418,414	159,879
1921	2,270,304	174,773
1922	1,562,480	66,391
1923	1,877,407	55,379
1924	2,084,325	59,309
1925	1,857,423	43,384
1926	1,496,848	38,874
1927	1,408,845	39,701

Sago, Crude, and Sago Flour.

	Pounds.	Dollars.
1871	1,719,256	45,601
1881	1,247,219	38,845
1891	3,970,594	101,302
1901	51,991	1,588
1913	12,389,192	230,992
1914	9,970,717	160,924
1915	6,630,400	106,090
1916	10,999,587	234,073
1917	7,893,055	204,864
1918	22,179,761	654,261
1919	3,092,967	104,915
1920	6,115,486	332,327
1921	2,591,377	86,583
1922	5,868,870	132,454
1923	7,591,363	206,265

Stated separately after 1923.

Sago, Crude

	Pounds.	Dollars.
1924	2,755,692	63,269
1925	71,401	3,382
1926	292,310	9,392
1927	235,543	8,132

Sago Flour

	Pounds.	Dollars.
1924	5,649,356	144,495
1925	5,895,116	163,253
1926	5,768,675	164,183
1927	5,050,136	143,835

Sal Ammoniac

(See Ammonia Chloride)

Salicin

	Pounds.	Dollars.
1881	.....	6,410
1891	4,987	6,428
1901	4,506	14,935
1913	3,274	12,146
1914	4,129	14,982
1915	1,800	6,560
1916	453	2,135
1917	390	2,307
1918	319	2,845
1919	560	5,791
1920	1,374	16,379
1921	1,843	19,771
1922	2,000	7,770
1923	2,618	6,641
1924	7,370	2,351
1925	19,684	4,308
1926	20,318	5,518
1927	25,088	4,089

Salol

	Pounds.	Dollars.
1914	660	219
1915	23,430	11,445
1916	4,069	2,182
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Salt

	100 pounds.	Dollars.
1912	2,901,815	379,540
1913	2,508,561	356,911
1914	3,397,496	456,426

Stated separately after 1914; see following classes.

Imports Into the United States

Salt in Bags, Barrels or Other Packages

	*Pounds.	Dollars.
1871	2,839,938	800,454
1881	4,124,422	1,242,543
1891	1,736,861	584,845
1901	1,114,571	372,482
1915	620,462	218,676
1916	552,616	195,791
1917	375,658	176,784
1918	268,426	158,832
1919	117,690	107,941
1920	1,463,794	280,084
1921	643,076	264,852
1922	784,226	322,153
1923	417,370	210,260
1924	17,224,372	166,980
1925	19,035,256	118,850
1926	13,494,824	110,572
1927	8,860,799	81,391

* Stated as "100 lbs." prior to 1925.

Salt in Bulk

	*Pounds.	Dollars.
1871	2,747,351	355,318
1881	5,293,610	658,068
1891	2,504,581	258,270
1901	1,920,837	187,681
1915	1,959,638	172,888
1916	1,591,032	134,975
1917	1,808,867	158,096
1918	755,044	145,640
1919	577,416	99,988
1920	202,446	174,364
1921	1,843,017	965,190
1922	*817,899	298,538
1923	1,412,040	335,020
1924	48,052,607	110,213
1925	112,124,461	122,501
1926	93,431,852	106,979
1927	32,185,494	44,885

* Stated as "100 lbs." prior to 1925.

Saltpeter, Crude

	*Tons.	Dollars.
1871	5,072,381	208,423
1881	11,014,226	414,630
1891	16,090,486	494,121
1901	41,343,897	473,578
1913	10,989,332	288,995
1914	3,547,252	115,470
1915	677,785	22,483
1916	5,412,130	734,123
1917	10,171,654	904,506
1918	8,715,327	956,853
1919	34,557,048	1,298,391
1920	20,862,012	929,045
1921	30,868,786	1,407,044
1922	6,208,779	189,569
1923	5,581,009	168,410
1924	1,600	102,017
1925	3,235	179,095
1926	11,869	675,134
1927	6,468	333,095

* Quantity stated in pounds prior to 1924.

Salvarsan and Similar Arsenical Medical Compounds

	Pounds.	Dollars.
1924	4	35
1925	.....	.....
1926	2,229	26,032
1927	22	2,541

Santonin and Its Salts

	Pounds.	Dollars.
1871	983	6,035
1881	483	2,317
1891	5	7
1901	6,584	11,984
1913	1,982	44,358
1914	5,230	125,128
1915	912	25,558
1916	20,925	586,850
1917	111	3,966
1918	223	7,502
1919	1,125	49,688
1920	2,778	162,335
1921	2,613	236,864
1922	7,980	959,153
1923	1,292	206,974
1924	1,444	150,049
1925	1,389	50,304
1926	1,532	61,361
1927	1,731	130,711

Sarsaparilla Root

	Pounds.	Dollars.
1871	242,314	46,067
1881	270,820	63,641
1891	631,985	90,694
1901	675,928	55,790
1913	301,308	38,360
1914	224,970	36,284
1915	250,178	36,055
1916	291,276	41,489
1917	146,047	18,994
1918	110,709	31,454
1919	221,946	58,126
1920	289,175	90,291
1921	128,043	38,346
1922	179,388	46,584
1923	186,763	51,510
1924	249,807	50,597
1925	122,573	26,544
1926	158,449	37,297
1927	211,578	45,818

Satin White and Precipitated Calcium Sulphate

	Pounds.	Dollars.
1926	2,478	86
1927	2,632	110

Scammony

	Pounds.	Dollars.
1924	47,066	1,537
1925	12,046	649
1926	62,334	2,522
1927	35,742	1,138

Seed, Anise

	Pounds.	Dollars.
1871	93,847	8,625
1881	367,186	29,386
1891	300,880	19,348
1901	391,659	20,356
1913	1,250,831	84,941
1914	231,117	15,412
1915	432,863	30,932
1916	789,487	68,713
1917	475,100	67,221
1918	364,406	61,330
1919	261,837	34,610
1920	658,425	115,358
1921	292,620	39,040
1922	441,085	46,913
1923	461,067	66,869
1924	646,605	77,803
1925	266,540	30,349
1926	433,371	44,006
1927	372,815	36,769

Seed, Canary

	Pounds.	Dollars.
1871	2,226,560	56,952
1881	3,087,620	86,838
1891	7,711,060	122,671
1901	3,731,800	67,791
1913	6,219,623	184,596
1914	4,503,280	190,530
1915	4,911,298	208,835
1916	5,368,551	181,898
1917	4,909,107	166,774
1918	3,242,223	201,469
1919	3,953,049	406,883
1920	7,084,523	538,554
1921	5,596,315	255,175
1922	8,255,957	254,394
1923	9,936,544	319,151
1924	9,654,355	370,409
1925	11,929,399	579,531
1926	12,604,143	656,252
1927	14,915,813	467,393

Seed, Caraway

	Pounds.	Dollars.
1871	.....	.....
*1881	1,801,860	113,387
1891	1,606,501	49,542
1901	1,281,382	53,808
1913	3,691,831	77,273
1914	1,909,300	234,294
1915	2,895,418	107,599
1916	2,978,581	172,742
1917	505,804	280,146
1918	635,677	71,745
1919	579,599	247,499
1920	2,475,082	204,493
1921	2,443,550	315,846
1922	3,707,392	154,389
1923	3,135,176	203,568
1924	2,418,014	394,054
1925	5,578,562	513,659
1926	4,511,279	519,323
1927	6,007,907	268,900

* Includes "Coriander."

Seed, Cardamom

	Pounds.	Dollars.
1871	5,557	13,932
1881	42,456	66,079
1891	41,399	21,945
1901	60,252	32,305
1913	113,461	104,287
1914	80,782	72,148
1915	152,679	106,180
1916	225,687	119,162
1917	214,464	88,605
1918	253,328	108,505
1919	139,808	70,114
1920	210,871	107,507
1921	190,312	101,581
1922	245,815	77,487
1923	318,368	70,847
1924	140,709	123,105
1925	162,472	219,892
1926	151,052	200,675
1927	170,611	182,273

Seed, Castor

(See Castor Beans)

Seed, Celery

	Pounds.	Dollars.
1914	405,738	86,809
1915	639,673	117,475
1916	607,581	161,839
1917	755,532	142,164
1918	167,684	65,563
1919	318,544	182,810
1920	938,027	314,160
1921	886,786	50,377
1922	763,906	139,273
1923	418,495	132,723
1924	610,923	141,826
1925	537,720	168,026
1926	1,152,003	232,311
1927	870,508	142,834

Seed, Coriander

	Pounds.	Dollars.
1871	45,189	2,574
*1881	.....	.....
1891	.....	.....
1901	655,382	17,092
1913	1,324,735	35,817
1914	1,238,430	46,158
1915	1,496,288	36,851
1916	1,587,923	54,870
1917	1,111,127	124,098
1918	1,829,183	255,279
1919	2,325,578	215,858
1920	2,179,989	94,996
1921	472,239	13,943
1922	1,996,314	77,314
1923	1,988,893	158,850
1924	1,320,218	92,551
1925	1,747,654	68,474
1926	1,713,613	56,775
1927	1,607,848	54,029

* Included in "Caraway."

Seed, Cotton

	Pounds.	Dollars.
1901	1,979,718	7,206
1914	8,891,303	66,035
1915	22,724,868	114,983
1916	30,113,684	251,568
1917	53,362,927	932,335
1918	35,435,460	1,047,657
1919	62,965,821	1,308,493
1920	59,906,675	1,087,974
1921	29,458,235	649,138
1922	59,937,765	518,406
1923	56,236,520	438,095
1924	166,089,886	1,482,411
1925	72,695,800	915,070
1926	87,292,542	1,098,097
1927	31,678,171	444,449

Seed, Cumin

	Pounds.	Dollars.
1871	1,065	180
*1881	.....	.....
*1891	496,723	12,087
*1901	1,090,261	22,744
1913	529,667	27,178
1914	530,550	31,709
1915	694,344	53,534
1916	1,446,006	225,672
1917	1,159,598	207,012
1918	1,520,691	198,855
1919	971,982	117,217
1920	1,836,564	167,292
1921	788,493	49,812
1922	1,126,887	103,796
1923	580,929	104,310
1924	683,313	130,671
1925	576,616	90,025
1926	666,136	70,830
1927	386,382	26,386

* Includes "Fenugreek."

Seed, Fennel

	Pounds.	Dollars.
1871	6,643	562
1881	150,062	9,313
1891	.....	.....
1901	107,523	6,918
1913	187,665	14,410
1914	207,135	12,299
1915	293,810	13,622
1916	312,927	20,751
1917	443,704	48,497
1918	218,091	24,133
1919	160,584	20,412
1920	282,522	34,985
1921	143,504	17,468
1922	222,650	18,479
1923	436,278	48,421
1924	393,168	40,680
1925	243,426	19,457
1926	236,022	19,932
1927	220,504	19,324

Seed, Fenugreek

	Pounds.	Dollars.
1871	16,457	571
1913	1,944,407	37,434
1914	1,619,230	29,601
1915	1,434,826	30,295
1916	811,270	20,672
1917	1,052,843	71,102
1918	851,532	80,504
1919	1,673,229	131,996
1920	1,043,036	44,168
1921	746,386	17,995
1922	207,192	4,932
1923	1,112,671	42,920
1924	575,009	23,524
1925	771,179	27,581
1926	941,167	27,352
1927	1,028,332	26,315

Seed, Flax

	Bushels (56 lbs.).	Dollars.
1871	4,113,580	5,977,926
1881	4,787,460	1,126,370
1891	1,479,239	1,629,901
1901	1,533,997	1,965,913
1913	5,274,922	8,118,319
1914	8,652,022	10,571,656
1915	10,373,902	12,983,548
1916	14,637,543	20,151,633
1917	12,484,859	25,295,231
1918	12,785,034	33,330,735
1919	8,433,428	22,643,803
1920	23,367,328	70,741,919
1921	16,168,523	39,132,988
1922	13,630,598	26,015,260
1923	24,988,621	50,399,196
1924	19,593,921	36,461,900
1925	13,419,147	31,328,431
1926	19,353,747	38,460,574
1927	24,136,253	42,921,722

Seed, Flax, Screenings

	Pounds.	Dollars.
1914	.....	4,748
1915	.....	673
1916	.....	4,506
1917	.....	2,052
1918	.....	37,818
1919	13,970,091	84,207
1920	31,055,762	188,710
1921	25,993,195	105,630
1922	18,320,345	46,247
1923	26,308,766	54,995
1924	18,833,694	46,369
1925	16,949,564	94,299
1926	18,259,278	47,294
1927	15,265,166	40,503

Seed, Hemp

	Pounds.	Dollars.
1871	857,396	28,224
1881	1,324,355	26,403
1891	3,558,146	73,409
1901	1,769,375	36,336
1913	2,347,979	44,483
1914	2,031,433	38,315
1915	2,591,026	39,992
1916	4,036,614	63,163
1917	5,355,921	110,176
1918	449,772	12,232
1919	760,353	26,395
1920	5,194,599	264,652
1921	3,763,970	82,245
1922	2,925,317	63,566
1923	4,055,649	88,983
1924	3,629,497	89,121
1925	3,608,887	90,497
1926	4,094,427	112,294
1927	5,337,796	130,183

Seed, Mustard, Whole

	Pounds.	Dollars.
1871	1,608,270	103,192
1881	1,157,832	63,240
1891	2,871,600	92,052
1901	4,489,206	159,993
1913	12,719,682	417,370
1914	11,543,941	370,964
1915	10,157,934	543,586
1916	16,402,112	1,070,567
1917	9,962,122	776,546
1918	13,035,827	683,096
1919	11,272,770	842,033
1920	14,817,829	1,510,783
1921	4,618,253	253,903
1922	12,490,026	487,569
1923	12,958,622	582,434
1924	14,586,459	634,418
1925	11,253,678	671,912
1926	15,442,561	978,226
1927	23,923,948	1,317,362

Seed, Pepper

	Pounds.	Dollars.
1913	10,414	4,579
1914	11,536	4,879
1915	15,324	6,379
1916	14,900	6,202
1917	4,962	2,846
1918	21,884	15,964
1919	7,022	11,042
1920	1,997	2,159
1921	5,376	4,301
1922	7,275	5,527
1923	3,335	3,002
1924	808	472
1925	3,733	2,367
1926	5,901	3,503
1927	2,318	1,808

Seed, Perilla and Sesame

	Pounds.	Dollars.
1924	13,463,511	637,866
1925	4,772,272	279,180
1926	1,783,243	91,674
1927	3,408,041	187,375

Seed, Poppy

	Bushels.	Dollars.
1891	5,323	13,108
1901	22,686	37,440
1913	77,396	237,069
1914	56,322	126,744
1915	52,899	172,018
1916	26,648	176,776
1917	3,878	25,565
1918	130,024	215,840
1919	11,320	29,206
1920	33,745	863,369
1921	86,096	476,246
1922	94,637	388,644
1923	105,587	640,399
1924	4,802,196	419,410
1925	6,045,993	551,117
1926	3,356,570	375,609
1927	5,373,243	531,915

Quantity stated in pounds after 1923.

Seed, Rape

	Pounds.	Dollars.
1871	145,323	6,450
1881	531,412	19,986
1891	891,441	19,681
1901	1,702,504	71,527
1913	4,308,750	169,634
1914	5,970,937	211,301
1915	5,194,132	230,280
1916	9,977,353	311,212
1917	4,819,360	186,877
1918	12,673,276	741,810
1919	742,780	43,935
1920	6,905,051	456,402
1921	4,934,014	277,547
1922	5,892,308	287,330
1923	7,117,384	326,711
1924	7,415,458	324,314
1925	5,094,289	280,992
1926	8,128,081	435,945
1927	8,084,394	388,034

Seed, Soya (Beans)

	Pounds.	Dollars.
1914	1,929,435	49,507
1915	3,837,885	87,306
1916	3,003,065	78,963
1917	5,334,334	132,572
1918	31,805,997	692,964
1919	3,203,203	145,996
1920	4,022,552	213,696
1921	4,661,458	190,674
1922	3,111,866	118,953
1923	3,605,736	148,428
1924	3,957,903	152,533
1925	3,860,406	143,882
1926	4,010,491	163,881
1927	3,884,319	150,509

Seed, Sunflower

	Pounds.	Dollars.
1924	2,936,924	86,607
1925	781,421	19,777
1926	176,263	4,815
1927	398,107	14,321

Seed, Worm, Levant

	Pounds.	Dollars.
1924	2,131	4,440
1925	2,987	2,596
1926	4,669	8,028
1927	4,563	6,028

Selenium and Its Salts

	Pounds.	Dollars.
1914	.....	363
1915	.....	43
1916	.....	16
1917	.....	302
1918	.....	2,236
1919	.....	.....
1920	114	25,866
1921	1,104	2,092
1922	1,654	3,534
1923	935	1,636
1924	305	626
1925	2,227	3,726
1926	11,450	20,934
1927	37,749	33,427

Senna

	Pounds.	Dollars.
1891	.....	51,876
1901	.....	91,884
1913	2,634,117	150,555
1914	2,454,772	173,054
1915	2,180,288	209,313
1916	2,794,400	361,881
1917	5,116,315	844,733
1918	3,575,066	771,067
1919	2,554,069	628,852
1920	3,425,200	572,419
1921	2,780,666	349,839
1922	1,946,635	191,538
1923	3,130,187	244,169
1924	2,968,361	281,008
1925	3,194,109	277,873
1926	3,072,449	198,138
1927	3,144,228	214,923

Sheep Dip

	Pounds.	Dollars.
1891	.....	893
1901	.....	59,016
1913	.....	63,527
1914	.....	16,842
1915	.....	32,963
1916	.....	21,198
1917	.....	17,185
1918	.....	26,989
1919	88,335	6,958
1920	172,562	13,880
1921	53,450	5,240
1922	10,377	1,480
1923	103,952	6,549
1924	92,509	6,781
1925	120,532	10,351
1926	96,988	9,493
1927	125,525	13,485

Siennas, Crude, Not Ground

	Pounds.	Dollars.
1891	1,147,282	24,070
1901	795,996	14,324
1914	6,489,329	55,925
1915	6,656,051	64,658
1916	5,206,292	83,428
1917	2,990,972	61,163
1918	2,731,181	61,301
1919	2,060,857	48,237
1920	2,555,705	76,715
1921	5,111,832	150,857
1922	2,590,299	102,534
1923	2,867,886	103,713
1924	1,555,650	46,733
1925	1,632,544	41,194
1926	1,935,778	48,537
1927	1,745,802	43,321

Silica for Use as Pigment

	Tons.	Dollars.
1927	24	149

Imports Into the United States

Silver Leaf

	*Leaves.	Dollars.
1871	1,160	5,500
1881	250	919
1891	1	15
1901	30	85
1913	17,130	2,122
1914	34,070	4,353
1915	31,298	3,718
1916	6,445	802
1917	1,125	135
1918	1,750	382
1919	.....	.....
1920	3,955	1,334
1921	8,650	3,446
1922	4,412	741
1923	4,475	887
1924	3,700	1,171
1925	381,000	1,284
1926	949,500	2,487
1927	725,000	2,240

* Quantity stated in 100 leaves prior to 1924.

Slag, Basic, for Fertilizers

	Tons.	Dollars.
1913	5,124	146,477
1914	9,509	108,565
1915	561	7,309
1916	81	1,031
1917	41	549
1918	2	54
1919	117	2,305
1920	22	689
1921	.....	.....
1922	33	938
1923	487	12,218
1924	495	7,679
1925	464	6,946
1926	153	2,335
1927	1,186	13,597

Soap Bark or Quillaya

	Pounds.	Dollars.
1924	332,356	18,917
1925	139,589	7,796
1926	509,535	25,972
1927	426,402	23,222

Soap, Castile

	Pounds.	Dollars.
1901	3,842,827	245,876
1914	4,604,995	368,310
1915	4,067,921	341,107
1916	3,245,550	335,580
1917	2,390,356	306,126
1918	1,027,148	147,286
1919	955,088	143,906
1920	2,170,294	380,981
1921	2,039,498	310,015
1922	2,289,479	289,635
1923	1,827,294	199,626
1924	1,575,001	167,892
1925	1,848,192	229,673
1926	1,876,440	230,451
1927	2,106,694	286,228

Soap, Medicated

	Pounds.	Dollars.
1914	74,132	29,306
1915	32,048	14,082
1916	16,455	3,523
1917	4,287	1,975
1918	16,844	7,412
1919	9,745	8,853
1920	10,217	4,568
1921	20,338	16,192
1922	29,183	9,193
1923	32,891	4,773
1924	32,364	8,143
1925	15,831	3,933
1926	65,774	13,365
1927	21,677	7,530

Soap, Toilet, Perfumed

	Pounds.	Dollars.
1871	.....	76,499
1881	.....	77,312
1891	.....	281,255
1901	.....	413,819
1914	.....	248,194
1915	.....	193,646
1916	.....	147,819
1917	.....	184,613
1918	.....	125,275
1919	137,301	113,996
1920	242,632	153,638
1921	363,900	227,824
1922	648,243	283,514
1923	601,134	241,129
1924	850,755	281,507
1925	869,019	328,641
1926	1,015,602	361,558
1927	1,191,446	439,709

Soap, Toilet, Unperfumed

	Pounds.	Dollars.
1871	.....	223,061
1881	.....	175,439
1891	.....	251,955
1914	.....	100,650
1915	.....	140,048
1916	.....	82,057
1917	.....	64,570
1918	.....	15,635
1919	39,151	12,110
1920	67,944	17,600
1921	85,635	15,001
1922	626,098	108,442
1923	442,499	85,943
1924	133,321	28,007
1925	166,410	37,709
1926	101,145	22,266
1927	192,214	43,801

Soaps, All Other

	Pounds.	Dollars.
1891	.....	45,560
1901	.....	14,478
1914	.....	84,745
1915	.....	53,940
1916	.....	18,245
1917	.....	21,406
1918	.....	31,639
1919	151,526	15,038
1920	198,233	22,189
1921	341,480	36,479
1922	498,572	57,539
1923	1,952,481	214,249
1924	2,084,451	209,065
1925	2,371,781	267,069
1926	2,633,859	293,555
1927	2,478,859	264,151

Soda Acetate

	Pounds.	Dollars.
1924	119,903	5,116
1925	403,451	15,534
1926	537,327	25,950
1927	955,574	59,701

Soda Arsenate

	Pounds.	Dollars.
1901	74,614	2,122
1914	228,270	8,267
1915	85,850	3,188
1916	36,176	3,436
1917	23,296	2,404
1918	35	88
1919	.....	.....
1920	11,448	1,118
1921	131,915	11,946
1922	14,146	1,122
1923	2,671	360
1924	21,168	2,315
1925	16,217	1,559
1926	145,452	9,618
1927	92,655	5,468

Soda Ash (Carbonate, Calcined)

	Pounds.	Dollars.
1871	145,428,215	2,387,583
1881	295,227,766	4,154,258
1891	326,099,239	4,122,700
1901	34,443,555	306,982
1913	3,100,790	35,461
1914	2,228,991	28,100
1915	2,127,542	29,022
1916	878,175	20,718
1917	1,047,295	29,239
1918	1,514,765	55,231
1919	.....	.....
1920	1,926,332	39,437
1921	6,630,873	93,802
1922	17,944,667	242,688
1923	1,529,334	22,556
1924	1,854,511	21,151
1925	259,586	6,203
1926	140,585	7,362
1927	108,112	4,910

Soda Benzoate

	Pounds.	Dollars.
1914	190	97
1915	40,903	19,183
1916	35,188	100,195
1917	80,755	339,868
1918	1,569	4,742
1919	55,188	11,459
1920	67,397	10,478
1921	1,032	10,122
1922	11,369	3,001
1923	.....	.....
1924	.....	.....
1925	110	43
1926	.....	.....
1927	.....	.....

Soda Bicarbonate

	Pounds.	Dollars.
1871	18,998,399	421,177
1881	1,951,851	58,312
1891	758,612	15,611
1901	144,182	5,006
1913	80,699	2,238
1914	88,873	2,324
1915	93,318	2,584
1916	129,414	2,867
1917	34,742	1,821
1918	29,444	944
1919	12,665	711
1920	13,353	3,514
1921	5,960	417
1922	357,216	5,627
1923	47,415	1,470
1924	7,396	466
1925	11,244	702
1926	20,925	1,345
1927	62,348	2,185

Soda Bisulphate (Niter Cake)

	Pounds.	Dollars.
1924	55,126	1,043
1925	1,067	55
1926	53	8
1927	4,630	271

Soda Bisulphite, Meta-Bisulphite

	Pounds.	Dollars.
1924	122,843	3,918
1925	366,715	10,452
1926	561,179	15,640
1927	1,773,354	44,947

Soda Borate

(See Borax, Refined)

Soda Bromide

	Pounds.	Dollars.
1924	168,232	13,826
1925	754,159	139,894
1926	81,760	24,204
1927	170,857	61,309

Soda Carbonate, Crystal

	Pounds.	Dollars.
1871	28,637,489	281,892
1881	.....	.....
1891	.....	.....
1901	611,961	5,663
1913	169,174	2,928
1914	307,488	3,323
1915	144,452	2,748
1916	49,231	889
1917	60,464	1,299
1918	70,116	2,028
1919	.....	.....
1920	203	16
1921	74,271	2,266
1922	16,042	623

Not stated after 1922.

Soda, Caustic

(See Soda Hydroxide)

Soda Chlorate

	Pounds.	Dollars.
1891	385,972	51,502
1901	795,659	44,173
1913	50	10
1914	469	84
1915	62	6
1916	22,176	3,105
1917	33,600	1,080
1918	44,800	8,064
1919	10	2
1920	424,280	38,973
1921	365,611	26,397
1922	1,031,351	46,910
1923	1,612,958	64,104
1924	732,967	28,226
1925	813,168	30,252
1926	1,485,980	52,981
1927	1,703,094	60,758

Soda Chromate and Bichromate

	Pounds.	Dollars.
1901	54,105	2,781
1913	9	3
1914	11,056	586
1915	.....	.....
1916	6,154	3,630
1917	.....	.....
1918	27,127	5,259
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	86,608	6,794
1923	527	108
1924	77	19
1925	50	10
1926	171	36
1927	56,011	1,495

Soda Cyanide

	Pounds.	Dollars.
1914	7,856,611	1,120,789
1915	6,187,418	955,907
1916	684,198	115,186
1917	1,875,824	861,777
1918	84,652	39,406
1919	138,970	13,406
1920	8,629,502	729,514
1921	7,733,063	1,074,434
1922	14,328,817	1,237,622
1923	25,454,043	2,130,464
1924	29,623,886	2,448,882
1925	28,362,771	2,593,074
1926	30,648,908	2,551,080
1927	32,377,820	2,587,336

Soda, Fluoride

	Pounds.	Dollars.
1927	990,978	56,104

Soda, Hydrated, Sal Soda

	Pounds.	Dollars.
1871	28,637,489	281,892
1881	15,695,044	119,793
1891	38,548,379	252,051
1901	5,169,275	22,779
1913	128,027	1,010
1914	163,626	1,274
1915	104,800	606
1916	67,210	334
1917	50	4
1918	75	3
1919	44,800	1,156
1920	5,056	603
1921	45,360	1,390
1922	23,419	262
1923	12,500	1,752
1924	60	6
1925	30,123	2,281
1926	46,518	1,602
1927	13,660	439

Soda Formate

	Pounds.	Dollars.
1927	40,603	2,565

Soda Hydroxide (Caustic)

	Pounds.	Dollars.
1871	27,952,469	877,717
1881	49,465,385	1,168,277
1891	76,788,411	1,821,127
1901	3,749,633	75,954
1913	671,480	25,364
1914	665,320	23,914
1915	444,185	19,318
1916	225,189	20,981
1917	109,983	21,052
1918	15,976	9,591
1919	2	2
1920	117,322	14,842
1921	67,950	7,766
1922	1,548,020	70,559
1923	118,300	12,027
1924	42,989	4,417
1925	70,905	8,813
1926	55,607	7,441
1927	207,819	35,937

Soda Hydrosulphite and Compounds

	Pounds.	Dollars.
1901	5,222,369	50,639
1913	7,299	228
1914	926,135	128,828
1915	1,855,223	268,693
1916	5,125	166
1917	1,836	1,198
1918	6,960	6,723
1919	27,616	6,112
1920	11,014	7,904
1921	6,160	4,085
1922	1,717,653	32,617
1923	674,131	85,276
1924	447,893	83,307
1925	420,253	88,329
1926	216,172	47,772
1927	235,231	52,135

Soda Nitrate

	Tons.	Dollars.
1871	25,145	1,254,961
1881	49,171	2,356,167
1891	104,813	2,929,760
1901	197,518	5,656,442
1913	586,315	20,713,375
1914	554,048	17,926,165
1915	575,371	16,240,510
1916	1,072,833	32,129,926
1917	1,261,993	44,428,196
1918	1,608,569	70,077,674
1919	1,410,714	68,229,548
1920	907,141	40,314,969
1921	853,758	42,322,979
1922	303,271	14,067,668
1923	897,198	43,062,754
1924	951,904	45,649,327
1925	1,104,808	51,952,270
1926	1,020,444	47,444,919
1927	646,869	28,891,712

Soda Nitrite

	Pounds.	Dollars.
1901	90,125	4,642
1913	1,269,544	57,595
1914	1,844,379	76,813
1915	1,696,567	74,263
1916	2,593,330	170,160
1917	3,675,179	261,555
1918	2,755,033	226,294
1919	1,746,976	159,355
1920	8,897,758	978,676
1921	6,721,107	791,611
1922	1,372,768	70,813
1923	5,108,678	218,573
1924	4,939,081	202,570
1925	1,396,429	58,282
1926	2,834,837	104,457
1927	477,625	16,976

Soda Phosphate

	Pounds.	Dollars.
1901	377,834	7,178
1913	30	1
1914	1,364,789	24,975
1915	485,300	7,765
1916	1,066	79
1917	1,561	521
1918	112	69
1919	.....	.....
1920	56	22
1921	238,416	8,113
1922	1,968,739	57,345
1923	1,096,392	32,136
1924	2,282,738	58,803
1925	2,081,753	47,596
1926	7,113,225	183,109
1927	13,615,618	317,923

Soda Prussiate Yellow (Ferrocyanide)

	Pounds.	Dollars.
1913	1,887,369	118,475
1914	2,295,724	171,834
1915	1,529,958	120,477
1916	527,130	136,250
1917	175,980	96,592
1918	.....	.....
1919	274,441	99,899
1920	2,633,090	445,849
1921	1,610,036	282,966
1922	3,832,491	473,065
1923	2,810,443	493,353
1924	1,789,868	68,687
1925	2,685,634	212,145
1926	1,254,551	85,207
1927	1,295,563	101,884

Soda Silicate (Water Glass)

	Pounds.	Dollars.
1871	384,882	7,325
1881	557,251	8,367
1891	535,030	6,429
1901	1,229,857	10,461
1913	1,032,113	9,400
1914	1,046,569	10,881
1915	1,587,902	16,292
1916	1,567,617	18,694
1917	1,203,844	18,493
1918	707,583	12,734
1919	673,777	16,647
1920	754,923	19,479
1921	1,069,468	32,033
1922	315,902	10,135
1923	1,050,735	23,187
1924	384,688	7,248
1925	243,561	6,949
1926	224,716	4,701
1927	203,317	4,003

Soda, Silicofluoride or Fluosilicate

	Pounds.	Dollars.
1927	3,242,041	102,476

Soda Sulphate, Anhydrous

	Tons.	Dollars.
1924	63	1,671
1925	131	5,262
1926	592	17,036
1927	2,115	56,800

Soda Sulphate, Crude (Salt Cake)

	*Pounds.	Dollars.
1871	.....	2,436
1881	698	8,187
1891	8,457	85,368
1901	3,412	34,645
1913	189	4,771
1914	206	2,436
1915	189	3,566
1916	91	6,392
1917	216	4,122
1918	463	8,382
1919	28	163
1920	.....	.....
1921	152	2,855
1922	189	5,994
1923	3,208	46,712
1924	9,216,939	73,497
1925	4,092,950	18,239
1926	8,222,185	49,143
1927	16,207,970	76,222

* Quantity stated in tons prior to 1924.

Soda, Sulphate, Crystalized

(See Glauber's Salt)

Soda, Sulphydrate

	Pounds.	Dollars.
1927	2,631,669	65,209

Soda Sulphide

	Pounds.	Dollars.
1913	951,664	13,068
1914	2,529,911	36,388
1915	1,263,366	18,228
1916	80,513	4,616
1917	344,617	7,214
1918	117,582	1,707
1919	314,887	10,494
1920	2,008,495	64,678
1921	741,965	40,440
1922	3,916,743	281,210
1923	16,502,750	449,388
1924	5,234,701	154,897

Stated separately after 1924.

Soda Sulphide, Containing Not More Than 35% Sodium

	Pounds.	Dollars.
1925	593,786	14,334
1926	737,738	19,794
1927	824,755	18,169

Soda Sulphide, Containing More Than 35% Sodium

	Pounds.	Dollars.
1925	1,953,060	47,730
1926	5,684,410	118,481
1927	8,706,410	173,575

Soda Sulphite

	Pounds.	Dollars.
1913	27,152	400
1914	382,540	5,627
1915	165,594	4,316
1916	435	60
1917	68,224	1,221
1918	20,206	223
1919	11,400	1,007
1920	68,239	3,119
1921	206,423	8,369
1922	2,585,868	73,357
1923	2,014,899	73,550
1924	880,699	19,808
1925	413,790	12,318
1926	609,072	17,483
1927	964,286	27,946

Soda Sulphoxlyate Compounds

	Pounds.	Dollars.
1924	22,456	546
1925	6,052	1,640
1926	4,365	979
1927	.....	.....

Soda Thiosulphate

	Pounds.	Dollars.
1924	797,621	11,893
1925	221,280	3,693
1926	71,296	1,445
1927	131,714	2,446

Sodium

	Pounds.	Dollars.
1920	5,600	694
1921	.....	.....
1922	418,997	64,976
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Spiegeleisen

	Tons.	Dollars.
1919	27	1,018
1920	3,812	175,969
1921	2,127	109,140
1922	2,204	75,412
1923	10,442	343,268
1924	5,387	161,713
1925	4,423	124,650
1926	5,275	152,740
1927	8,216	243,195

Spirits, Distilled

	Proof gallons.	Dollars.
1927	538	2,439

Imports Into the United States

Sponges

		Dollars.
1871	.....	113,127
1881	.....	229,292
1891	.....	381,879
1901	.....	540,223
1912	.....	311,547
1913	.....	289,909

Includes manufactures of prior to 1914. Stated separately after 1913.

Sponges

	Pounds.	Dollars.
1914	.....	279,211
1915	.....	334,252
1916	.....	454,626
1917	.....	593,253
1918	.....	510,374
1919	.....	475,817
1920	.....	607,440
1921	.....	459,231
1922	.....	563,092
1923	.....	787,806
1924	1,419,389	787,034
1925	1,037,563	751,353
1926	971,772	950,775
1927	191,214	237,955

Sponges, Manufactures of, N. E. S.

	Pounds.	Dollars.
1914	.....	38,300
1915	.....	42,042
1916	.....	58,797
1917	.....	55,077
1918	.....	27,682
1919	.....	8,053
1920	.....	24,212
1921	.....	37,219
1922	.....	34,245
1923	.....	22,346
1924	2,193	7,192
1925	1,451	3,409
1926	2,613	3,799
1927	766	845

Starch, Potato

	Pounds.	Dollars.
1871	7,571	658
1881	35,896	2,124
1891	.....	.....
1901	.....	.....
1913	14,180,856	375,713
1914	13,934,741	233,661
1915	10,941,257	253,859
1916	2,237,717	72,736
1917	17,545,689	797,327
1918	13,195,079	902,499
1919	11,913,821	974,892
1920	9,017,574	547,672
1921	10,801,488	466,652
1922	7,156,786	319,174
1923	10,852,328	331,523
1924	11,271,952	353,917
1925	8,745,680	339,648
1926	15,349,232	521,152
1927	24,255,730	835,524

Starch, Rice

	Pounds.	Dollars.
1924	165,878	8,567
1925	146,451	13,367
1926	313,069	15,817
1927	323,054	18,712

Starch, Soluble or Chemically Treated

	Pounds.	Dollars.
1913	321,071	13,345
1914	1,697,392	54,604
1915	569,297	21,559
1916	7,420	417
1917	44,788	3,244
1918	.....	.....
1919	1,223	148
1920	.....	.....
1921	143,153	10,492
1922	221,259	13,713
1923	364,247	16,633
1924	397,371	16,715
1925	977,372	43,352
1926	1,132,824	56,454
1927	1,102,530	66,215

Starch, Wheat

	Pounds.	Dollars.
1924	25,851	1,146
1925	33,069	1,670
1926	27,116	1,482
1927	44,092	2,343

Starch, All Other (Except Cornstarch)

	Pounds.	Dollars.
1871	25,078	1,896
1881	1,108,319	33,354
1891	3,743,219	86,694
1901	6,753,103	144,861
1913	677,785	40,641
1914	962,314	52,168
1915	932,934	52,537
1916	1,242,918	78,833
1917	888,345	62,132
1918	590,469	67,358
1919	224,938	35,537
1920	1,024,662	109,008
1921	474,700	54,871
1922	602,905	56,949
1923	337,446	27,412
1924	515,635	44,133
1925	395,126	52,274
1926	1,244,766	80,955
1927	1,865,279	100,806

Stearin, Vegetable, see "Candle Pitch, Etc."

Stramonium

	Pounds.	Dollars.
1924	190,035	7,020
1925	148,552	6,256
1926	175,404	11,944
1927	344,058	28,149

Strontianite or Mineral Strontium Carbonate and Celestite or Mineral Strontium Sulphate

	Pounds.	Dollars.
1924	3,473,949	12,872
1925	3,190,208	14,133
1926	3,808,195	46,405
1927	2,817,844	57,559

Strontium Carbonate, Precipitated

	Pounds.	Dollars.
1924	13,830	1,388
1925	44,359	1,451
1926	51,481	1,681
1927	2,051	1,630

Strontium Nitrate

	Pounds.	Dollars.
1924	1,209,974	79,844
1925	2,098,410	120,731
1926	688,913	36,611
1927	1,816,053	101,316

Strontium Oxide

	Pounds.	Dollars.
1891	.....	63
1901	.....	1,755
1913	.....	474
1914	.....	1,969
1915	.....	7,268
1916	.....	8,311
1917	.....	21,184
1918	.....	6,873
1919	316,640	1,358
1920	1,050,347	6,286
1921	2,816,726	16,020
1922	.....	.....
1923	22,285	1,143
1924	.....	.....
1925	663	120
1926	4,400	303
1927	2,304	320

Strychnine Alkaloid

	Ounces.	Dollars.
1924	28,835	21,115
1925	35,700	16,245
1926	39,000	15,674
1927	47,500	14,081

Strychnine Sulphate

	Ounces.	Dollars.
1924	11,291	5,592
1925	16,341	7,094
1926	36,583	14,458
1927	42,000	11,702

Strychnine Salts, N. E. S.

	Ounces.	Dollars.
1871	5	12
1881	99	122
1891	230	175
1901	4,731	1,932
1913	966,575	4,112,057
1914	846,905	3,753,879
1915	26,967	11,449
1916	59,278	37,652
1917	33,323	25,617
1918	9,688	9,726
1919	186	362
1920	18,448	32,901
1921	29,029	45,851
1922	106,902	133,271
1923	165,730	186,751
1924	84,367	91,102
1925	64,151	26,688
1926	80,417	34,145
1927	24,008	7,800

Sulphur Ore as Pyrites or Sulphuret of Iron, Containing Not in Excess of 25 Percent of Sulphur

	Tons.	Dollars.
1891	19,605	77,694
1901	352,644	1,184,899
1913	532	377
1914	17,419	5,408
1915	26,967	11,449
1916	1,370,059	7,121,614
1917	935,749	5,855,913
1918	807,084	4,526,563
1919	370,272	2,018,447
1920	425,545	2,190,012
1921	263,633	1,299,238
1922	228,067	701,334
1923	326,833	1,744,482
1924	238,358	709,488
1925	281,081	772,264
1926	318,702	766,051
1927	288,749	645,284

Sulphur or Brimstone, Crude

	Tons.	Dollars.
1871	40,699	1,212,448
1881	113,190	2,713,485
1891	119,891	2,465,732
1901	159,710	2,875,115
1913	19,258	374,024
1914	20,236	346,875
1915	25,842	442,975
1916	22,539	372,599
1917	11,819	205,980
1918	282	8,677
1919	75	1,822
1920	51	1,896
1921	3	124
1922	2	141

See "Sulphur and Sulphur Ore" after 1922.

Sulphur, Lac or Precipitated

	Pounds.	Dollars.
1881	.....	775
1891	35,535	2,395
1901	61,357	3,612
1913	715,876	13,723
1914	233,896	13,636
1915	208,568	13,187
1916	217,997	16,628
1917	69,145	7,009
1918	84,224	10,797
1919	39,548	5,897
1920	99,001	16,025
1921	49,306	13,259
1922	21,904	3,852

See "Sulphur and Sulphur Ore" after 1922.

Sulphur, Refined

	Tons.	Dollars.
1871	104	4,328
1881	80	2,555
1891	307	6,579
1901	154	4,115
1913	1,742	41,626
1914	1,523	39,634
1915	1,296	36,275
1916	850	26,778
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	50	2,512
1921	35	2,329
1922	.....	.....

See "Sulphur and Sulphur Ore" after 1922.

Sulphur, Sublimed, or Flowers of

	Tons.	Dollars.
1871	74	3,574
1881	110	4,226
1891	271	8,386
1901	740	20,392
1913	6,104	122,093
1914	599	15,841
1915	950	31,202
1916	200	7,512
1917	295	13,317
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	98	4,004

See "Sulphur and Sulphur Ore" after 1922.

Sulphur and Sulphur Ore

	Tons.	Dollars.
1923	1,810	31,028
1924	1,169	46,086
1925	8	257
1926	146	5,387
1927	1,234	22,688

Sulphur in Other Forms Not Elsewhere Specified

	Pounds.	Dollars.
1924	*4,878,740	123,018
1925	3,116,288	72,485
1926	333,334	14,393
1927	249,801	23,908

* Figures for six months ending June 30, 1924.

Sumac Extract

	Pounds.	Dollars.
1891	239,890	77,152
1901	161,317	52,105
1913	1,270,825	44,568
1914	1,463,297	59,022
1915	727,449	35,066
1916	36,003	4,108
1917	161,507	13,944
1918	23,706	2,616
1919	.....	.....
1920	.....	.....
1921	44,049	3,273
1922	37,262	3,875
1923	188,221	14,408
1924	252,508	17,000
1925	73,958	5,541
1926	54,223	5,504
1927	103,801	9,164

Sumac, Ground

	*Tons.	Dollars.
1891	11,412,307	235,729
1901	9,935,746	179,801
1913	14,112,112	289,255
1914	9,678,719	231,580
1915	12,048,917	294,434
1916	20,411,022	527,102
1917	10,877,008	337,404
1918	10,557,920	355,192
1919	4,128,309	145,286
1920	16,636,562	593,739
1921	2,245,615	62,786
1922	9,155,685	187,335
1923	12,771,493	322,487
1924	3,691	307,498
1925	3,438	402,333
1926	2,647	262,523
1927	3,180	208,634

* Quantity stated in pounds prior to 1924.

Sumac, Unground

	*Tons.	Dollars.
1871	10,141,787	420,823
1881	13,667,892	409,400
1891	2,953,202	65,802
1901	1,482,822	26,138
1913	621,366	12,420
1914	1,335,566	32,238
1915	1,258,204	32,613
1916	1,131,369	28,164
1917	760,015	27,769
1918	3,619,439	141,063
1919	5,182,736	162,557
1920	4,543,852	161,497
1921	481,491	11,236
1922	3,461,640	81,175
1923	5,991,529	111,079
1924	631	49,963
1925	896	80,703
1926	457	39,721
1927	1,127	70,822

* Quantity stated in pounds prior to 1924.

Talc, Ground, Etc. (Except Toilet Preparations)

	Pounds.	Dollars.
1871	.....	496
1881	.....	18,735
1891	.....	.....
1901	1,138,358	7,574
1913	23,660,095	122,623
1914	32,498,066	178,023
1915	30,434,850	187,871
1916	33,738,067	207,179
1917	34,288,429	238,479
1918	27,550,409	267,265
1919	23,090,219	207,584
1920	36,579,129	365,912
1921	30,653,746	318,058
1922	33,491,507	336,514
1923	39,031,023	396,227
1924	33,290,949	326,074
1925	39,640,972	352,466
1926	43,906,493	402,312
1927	48,313,058	445,578

Talc, Steatite and French Chalk, Crude and Unground

	Pounds.	Dollars.
1871	162,982	3,906
1881	.....	.....
1891	.....	.....
1901	.....	.....
1914	2,807,974	23,369
1915	3,478,711	15,322
1916	4,681,165	9,703
1917	3,736,899	11,477
1918	4,721,980	10,528
1919	2,804,000	10,324
1920	2,958,582	10,254
1921	844,150	3,028
1922	420,075	5,845
1923	833,223	15,605
1924	1,161,518	14,495
1925	167,697	4,211
1926	149,412	4,310
1927	785,548	31,305

Tallow, Animal

	Pounds.	Dollars.
1871	69,244	4,606
1881	65,044	4,318
1891	77,557	3,278
1901	84,449	5,108
1913	490,505	41,710
1914	3,371,833	231,924
1915	12,634,594	823,958
1916	4,779,076	396,787
1917	31,136,527	3,108,274
1918	98,176,560	14,365,676
1919	10,808,742	1,408,007
1920	11,251,437	1,665,799
1921	11,762,499	1,338,362
1922	1,405,820	79,702
1923	10,743,853	814,526
1924	2,467,886	194,577

Stated separately after 1924.

Tallow, Beef

	Pounds.	Dollars.
1925	2,592,420	251,341
1926	12,716,398	1,143,383
1927	2,049,847	156,191

Tallow, Mutton

	Pounds.	Dollars.
1925	126,867	9,142
1926	450,014	40,260
1927	234,737	16,636

Tallow, Vegetable

	Pounds.	Dollars.
1924	3,887,486	278,365
1925	7,080,887	538,890
1926	2,705,465	230,073
1927	5,715,479	420,801

Tanks, Drums, or Vessels, for Holding Gas, Liquids, or Other Materials

	Number.	Dollars.
1914	.....	459,842
1915	.....	226,911
1916	.....	242,773
1917	.....	234,217
1918	.....	153,716
1919	.....	151,640
1920	.....	385,300
1921	.....	441,371
1922	.....	174,842
1923	.....	315,267
1924	.....	247,990
1925	.....	441,159
1926	.....	306,628
1927	155,621	862,867

Tanning Extracts, N. E. S.

	Pounds.	Dollars.
1924	413,324	29,285
1925	553,989	27,888
1926	602,904	34,969
1927	235,883	9,843

Tanning Materials, Crude, Not Stated Elsewhere.

	Pounds.	Dollars.
1881	.....	560
1891	.....	2,603
1901	.....	46,739
1914	.....	81,595
1915	.....	64,995
1916	.....	270,292
1917	.....	365,596
1918	.....	95,446
1919	13,227,193	332,898
1920	49,008,222	1,692,589
1921	25,764,287	657,162
1922	9,214,918	136,184
1923	6,638,550	94,291
1924	9,940,403	78,625
1925	7,635,131	83,678
1926	4,702,305	32,644
1927	4,790,273	36,571

Tanning Materials, Synthetic, From Coal Tar

	Pounds.	Dollars.
1926	665	1,081
1927	99	336

Tapioca, Tapioca Flour, and Cassava

	Pounds.	Dollars.
1871	.....	62,110
1881	4,857,434	187,983
1891	8,147,585	243,885
1901	17,411,046	430,602
1914	71,304,728	1,590,614
1915	60,080,060	1,324,184
1916	64,838,470	1,992,399
1917	100,517,107	3,506,479
1918	92,351,460	4,734,860
1919	53,379,896	2,618,121
1920	119,746,319	6,848,677
1921	56,975,928	2,757,298
1922	72,224,281	1,956,308
1923	86,364,169	3,257,366
1924	85,173,291	4,108,231

Stated separately after 1924.

Tapioca

	Pounds.	Dollars.
1925	16,277,436	831,036
1926	5,428,692	190,253
1927	26,901,394	1,214,753

Tapioca Flour

	Pounds.	Dollars.
1925	93,880,875	3,680,233
1926	98,598,940	3,043,095
1927	65,709,758	1,841,726

Tapers, Fuses, and Time-Burning Chemical Signals

		Dollars.
1926	.....	6,035
1927	.....	5,748

Tar, Coal, Crude, and Pitch of

	Barrels.	Dollars.
1891	99,351	236,450
1901	39,062	104,547
1913	14,093	23,691
1914	17,515	25,140
1915	16,891	23,874
1916	19,206	32,635
1917	5,594	10,702

Stated separately after Sept. 8, 1916.

Tar, Coal, Crude

	Barrels.	Dollars.
1891	3,887	11,644
1901	.....	.....
1917	5,864	10,381
1918	10,031	15,608
1919	25,400	42,270
1920	14,439	28,882
1921	29,694	43,318
1922	29,072	57,286
1923	11,881	35,942
1924	13,284	41,058
1925	11,322	33,527
1926	17,140	67,124
1927	11,920	34,499

Tar, Coal, Pitch

	Barrels.	Dollars.
1891	.....	15,499
1901	.....	.....
1917	7,258	8,146
1918	15,818	32,582
1919	3,293	7,098
1920	6,168	15,425
1921	6,271	20,060
1922	24	153
1923	1,565	5,501
1924	5,756	17,370
1925	1,608	5,788
1926	4,682	16,774
1927	2,531	9,606

Tar and Pitch of Wood

	Barrels (280 lbs.)	Dollars.
1871	.....	5,063
1881	.....	7,769
1891	4,319	13,411
1901	1,797	10,414
1914	561	7,946
1915	129	1,551
1916	31	282
1917	631	5,908
1918	51	214
1919	132	215
1920	287	1,860
1921	712	3,677
1922	166	2,225
1923	434	6,754
1924	462	4,147
1925	1,938	18,931
1926	29,163	216,438
1927	25,115	191,266

Imports Into the United States

Tartar Emetic or Potassium-Antimony Tartrate

	Pounds.	Dollars.
1924	15,145	3,088
1925	5,180	898
1926	.....	.....
1927	16,211	2,905

Tea, Impure, Waste, Siftings or Sweepings, for Manufacturing

	Pounds.	Dollars.
1901	.....	25,802
1914	5,213,956	178,302
1915	4,739,208	158,366
1916	4,796,766	201,507
1917	7,626,688	478,326
1918	10,887,595	782,473
1919	4,860,200	371,975
1920	11,076,802	617,592
1921	12,522,860	738,594
1922	2,823,585	120,887
1923	2,805,135	102,082
1924	5,179,370	173,061
1925	6,498,969	248,829
1926	4,209,274	262,688
1927	2,672,306	114,361

Terpin Hydrate

	Pounds.	Dollars.
1914	6,929	1,020
1915	4,477	657
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	.....	.....
1921	.....	.....
1922	.....	.....
1923	443	214
1924	.....	.....
1925	1,250	283
1926	.....	.....
1927	4,470	1,004

Terra Alba, All Kinds

	Pounds.	Dollars.
1871	.....	133,028
1881	.....	39,983
1891	20,762,212	50,128

Not stated after 1891.

Terra Alba, Not Made from Gypsum or Plaster Rock

	Pounds.	Dollars
1920	85,200	674
1921	11,200	133
1922	135,600	1,226

Not stated after 1922.

Tetrachloroethane

	Pounds.	Dollars.
1924	263,954	10,427
1925	493,185	17,307
1926	16,536	989
1927	70,173	3,585

Theobromine and Its Salts

	Pounds.	Dollars.
1924	209	510
1925	440	956

Not stated after 1925.

Thiocarbanilide

	Pounds.	Dollars.
1925	1,496	2,510
1926	.....	.....
1927	.....	.....

Thorium Nitrate

	Pounds.	Dollars.
1901	12,986	41,663
1913	112,105	212,263
1914	144,413	309,260
1915	78,516	186,385
1916	22,261	63,496
1917	1,877	5,268
1918	.....	.....
1919	.....	.....
1920	15,409	17,503
1921	59,903	105,788
1922	14,745	27,196
1923	34,192	38,840
1924	13,758	14,288
1925	13,248	13,589
1926	34,508	40,285
1927	8,350	11,862

Thorium Oxide and Other Salts

	Pounds.	Dollars.
1914	2,465	4,075
1915	82	359
1916	2,612	6,092
1917	1,616	3,984
1918	.....	.....
1919	28	124
1920	.....	.....
1921	.....	.....
1922	7,830	12,329
1923	8,963	9,765
1924	.....	.....
1925	583	626
1926	689	778
1927	.....	.....

Thyme Leaves, Unground

	Pounds.	Dollars.
1924	85	14
1925	1,592	132
1926	118	36
1927	3,498	221

Thymol.

	Pounds.	Dollars.
1914	19,045	24,765
1915	4,772	12,921
1916	443	1,973
1917	1,759	13,741
1918	34,978	113,279
1919	8,430	75,013
1920	8,948	56,744
1921	9,598	63,326
1922	8,306	30,740
1923	8,148	22,738
1924	10,315	21,548
1925	22,757	62,740
1926	25,336	67,870
1927	23,754	52,183

Tin Bichloride, Tetrachloride and Other Compounds

	Pounds.	Dollars.
1923	2,451,917	99,402
1924	149,330	8,191
1925	12,846	2,793
1926	92,291	11,727
1927	134,976	44,606

Tin Foil

	Pounds.	Dollars.
1871	.....	29,422
1881	.....	33,456
1891	.....	31,880
1901	.....	48,829
1913	.....	430
1914	.....	649
1915	.....	1,216
1916	.....	1,506
1917	.....	2,283
1918	.....	212
1919	.....	84
1920	.....	465
1921	.....	9,371
1922	.....	3,027
1923	.....	2,961
1924	1,386	570
1925	2,958	2,518
1926	15,307	6,451
1927	19,945	15,137

Tin Ore, Cassiterite, and Black Oxide

	*Tons.	Dollars.
1871	.....	3,061
1881	.....	2,510
1891	224	7
1901	2,200	640
1913	82,983	18,536
1914	19,549	3,022
1915	49,068	10,798
1916	40,533	8,134
1917	54,367	12,816
1918	29,014	8,914
1919	.....	.....
1920	14	6,924
1921	85	16,028
1922	104	31,378
1923	5,331	2,868,253
1924	950	798,017
1925	212	110,962
1926	301	168,522
1927	154	100,513

* Quantity stated in pounds prior to 1920.

Tin Powder

	Pounds.	Dollars.
1924	5,296	3,441
1925	8,640	6,567
1926	2,953	2,703
1927	1,020	1,033

Titanium

	Pounds.	Dollars.
1921	2,315	1,030
1922	13,886	3,334
1923	16,748	3,509
1924	17,029	3,827
1925	.....	.....
1926	.....	.....
1927	.....	.....

Titanium-Potassium Oxalate and Compounds

	Pounds.	Dollars.
1924	13,201	1,904
1925	75,033	12,917
1926	80,452	11,979
1927	64,831	9,868

Toilet Brushes, N. E. S.

	Dozen.	Dollars.
1926	473,994	431,134
1927	644,859	551,957

Toilet Waters Containing Alcohol

	Pounds.	Dollars.
1924	38,105	44,253
1925	10,646	24,421
1926	7,491	11,121
1927	2,723	6,494

Toilet Waters Not Containing Alcohol

	Pounds.	Dollars.
1924	33,127	28,297
1925	120,290	74,142
1926	107,896	40,717
1927	6,325	3,100

Tolidin, Toluene Sulfochloride, Etc.

	Pounds.	Dollars.
1925	23,056	3,000
1926	2,329	1,900
1927	19,709	7,867

Toluene

	Pounds.	Dollars
1925	73,400	2,642
1926	29,064	1,797
1927	154	55

Tonka Beans

	Pounds.	Dollars.
1871	.....	19,694
1881	.....	80,636
1891	.....	312,537
1901	.....	19,821
1913	783,888	1,140,409
1914	545,156	677,195
1915	132,119	93,222
1916	143,321	94,700
1917	222,754	156,974
1918	405,429	204,260
1919	85,487	46,591
1920	266,090	255,497
1921	139,649	106,481
1922	149,777	111,284
1923	634,026	209,467
1924	302,663	256,610
1925	255,608	175,845
1926	311,942	354,796
1927	291,471	268,637

Tooth Brushes

	Dozen.	Dollars.
1926	1,178,834	578,818
1927	680,554	319,687

Trichloroethylene

	Pounds.	Dollars.
1924	308,673	14,481
1925	222,192	8,689
1926	.....	.....
1927	1,321	92

Turmeric

	Pounds.	Dollars.
1901	.....	43,874
1913	.....	33,735
1914	.....	22,978
1915	.....	10,145
1916	.....	180,948
1917	.....	112,372
1918	.....	602
1919	689,962	46,205
1920	1,312,539	92,413
1921	737,736	37,136
1922	766,461	26,824
1923	798,052	36,014
1924	1,290,832	89,304
1925	1,084,448	82,334
1926	1,027,608	71,027
1927	1,125,891	47,026

Turpentine, Gum, Including Venice

	Pounds.	Dollars.
1871	.....	2,980
1881	56,732	8,104
1891	70,185	8,138
1901	191,028	14,789
1913	60,678	9,169
1914	112,010	17,434
1915	20,904	3,172
1916	7,901	772
1917	1,045	248
1918	.....	.....
1919	.....	.....
1920	5,283	2,540
1921	10,914	2,626
1922	4,972	1,027
1923	32,946	4,526
1924	10,187	1,353
1925	9,274	1,534
1926	95,737	11,865
1927	144,699	16,227

Turpentine, Spirits

	Gallons.	Dollars.
1871	128	116
1881	.....	.....
1891	2,900	1,219
1901	12,697	4,486
1913	56,457	19,295
1914	72,679	28,818
1915	13,680	6,095
1916	20,675	8,252
1917	18,286	6,271
1918	1,433	564
1919	1,422	724
1920	28,506	37,555
1921	16,069	15,121
1922	70,467	45,184
1923	145,148	144,114
1924	153,394	125,391
1925	222,486	161,768
1926	300,855	220,775
1927	331,398	208,169

Ultramarine Wash Blue and All Blues Containing Ultramarine

	Pounds.	Dollars.
1871	.....	115,816
1881	913,935	127,352
1891	134,352	11,404
1901	319,903	37,790
1913	695,988	62,250
1914	901,208	78,392
1915	641,381	62,715
1916	401,605	44,709
1917	388,201	36,433
1918	359,136	35,210
1919	197,573	25,861
1920	438,443	41,136
1921	898,739	104,263
1922	688,282	69,599
1923	317,708	48,485
1924	777,406	94,818
1925	985,822	142,198
1926	913,463	131,037
1927	849,290	109,362

Umbers, Crude, Not Ground

	Pounds.	Dollars.
1871	470,392	7,064
1881	1,475,835	11,126
1891	1,586,840	17,150
1901	1,798,788	19,689
1914	3,381,919	25,798
1915	7,225,537	36,128
1916	8,914,389	55,076
1917	9,211,112	66,217
1918	665,195	18,850
1919	425,017	11,776
1920	5,007,345	47,205
1921	7,124,483	77,526
1922	2,666,867	39,155
1923	9,168,941	80,580
1924	5,676,868	55,233
1925	6,570,820	46,568
1926	6,744,894	46,903
1927	5,362,765	36,142

Umbers, Washed or Ground

	Pounds.	Dollars.
1924	1,111,056	28,309
1925	1,109,722	24,061
1926	1,333,171	48,693
1927	1,237,456	28,259

Uranium Oxide and Salts

	Pounds.	Dollars
1891	.....	1,974
1901	.....	15,578
1913	.....	21,435
1914	.....	5,782
1915	.....	1,969
1916	.....	2,099
1917	.....	3,018
1918	.....	.....
1919	1,154	1,309
1920	.....	.....
1921	441	468
1922	6,894	5,487
1923	1,298	2,225
1924	11,039	12,695
1925	16,775	14,115
1926	27,476	25,490
1927	66,082	58,282

Urea

	Pounds.	Dollars
1914	17,981	8,798
1915	65,464	31,994
1916	79,172	32,498
1917	56,429	36,248
1918	22,777	17,479
1919	11,576	7,698
1920	18,693	10,784
1921	7,714	5,349
1922	136,161	34,953
1923	195,208	40,275
1924	66,318	9,642
1925	101,291	12,406
1926	302,783	27,308
1927	657,243	43,591

Valerian, Crude

	Pounds.	Dollars
1919	54,847	34,450
1920	184,195	64,863
1921	23,084	4,624
1922	29,041	2,816
1923	75,867	7,314
1924	64,142	4,541
1925	75,555	5,792
1926	41,875	8,507
1927	95,175	13,708

Valonia

	Pounds.	Dollars
1913	5,295,762	79,610
1914	7,654,056	116,408
1915	6,352,190	88,061
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	150	5
1920	16,636,249	651,984
1921	11,723,598	331,443
1922	23,643,552	444,490
1923	15,070,543	298,704
1924	17,029,469	309,247
1925	24,806,008	404,501
1926	10,257,054	176,980
1927	20,132,216	380,353

Valonia and Myrobalans Extract for Tanning

	Pounds.	Dollars.
1919	2,037,349	40,202
1920	2,058,075	59,765
1921	967,892	26,215
1922	1,663,783	35,654
1923	247,951	14,515
1924	658,620	21,659
1925	226,035	12,010
1926	103,446	7,255
1927	558,547	36,183

Vanilla Beans

	Pounds.	Dollars.
1871	14,764	113,212
1881	37,214	206,030
1891	171,024	594,949
1901	248,994	875,229
1913	1,049,617	2,641,574
1914	694,531	1,739,674
1915	749,146	1,839,995
1916	796,800	1,474,228
1917	733,565	1,583,325
1918	759,096	1,202,413
1919	1,003,072	1,687,305
1920	1,035,670	2,181,210
1921	977,004	1,811,396
1922	1,156,932	2,024,474
1923	1,244,107	2,830,300
1924	831,154	3,440,601
1925	688,798	3,560,843
1926	944,683	3,332,793
1927	974,922	2,403,147

Vanillin

	Pounds.	Dollars.
1901	5,515	2,475
1914	33,668	6,446
1915	451	98
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	.....	.....
1920	71	94
1921	36,178	22,530
1922	10,510	4,240
1923	3,514	1,448
1924	.....	.....
1925	1	6
1926	584	1,273
1927	334	1,426

Varnish, Gold Size, or Japan.

	Gallons.	Dollars.
1871	.....	252
1881	.....	2,789
1891	.....	1,618
1901	.....	.....
1914	.....	8,706
1915	.....	10,228
1916	.....	423
1917	.....	2,504
1918	.....	1,217
1919	2,005	8,192
1920	930	2,183
1921	1,019	4,456
1922	2,733	7,620

Included in "Varnish, All Other," after 1922.

Varnish, Spirit

	Gallons.	Dollars.
1891	2,472	7,456
1901	2,603	4,774
1914	10,127	24,329
1915	581	1,937
1916	1,818	6,874
1917	2,771	13,425
1918	1,286	3,083
1919	37	676
1920	782	3,531
1921	707	2,786
1922	2,985	12,431
1923	2,198	8,065
1924	1,407	3,260
1925	487	1,786
1926	231	1,209
1927	336	1,847

Varnishes, All Other, Including Gold Size or Japans

	Gallons.	Dollars.
1871	23,862	72,266
1881	86,814	140,651
1891	32,600	91,111
1901	43,007	114,985
1914	16,888	31,032
1915	27,943	51,791
1916	25,542	62,776
1917	20,366	47,740
1918	10,923	24,345
1919	4,256	14,370
1920	24,271	78,507
1921	17,583	65,292
1922	22,758	76,686
1923	29,118	112,509
1924	17,339	61,701
1925	27,197	60,630
1926	22,095	55,303
1927	33,327	60,925

Venetian Red

	Pounds.	Dollars.
1891	.....	19,138
1901	4,517,458	96,492
1914	3,858,611	33,077
1915	2,478,959	20,677
1916	1,687,616	12,947
1917	835,161	8,296
1918	433,638	5,135
1919	275,800	3,627
1920	278,673	4,524
1921	393,722	7,968
1922	72,519	2,246

Not stated after 1922.

Verdigris or Acetate and Sub-Acetate of Copper.

	Pounds.	Dollars.
1871	331,657	56,873
1881	160,745	35,163
1891	212,019	32,016
1901	44,439	6,211
1914	19,009	2,530
1915	17,569	2,491
1916	81,005	15,648
1917	50,216	13,052
1918	26,837	8,694
1919	34,280	13,911
1920	8,809	2,122
1921	27,607	5,760
1922	19,569	3,478
1923	26,278	4,727
1924	62,306	4,787
1925	98,215	10,111
1926	49,945	6,136
1927	28,325	3,656

Imports Into the United States

Vermilion Reds (Containing Quicksilver)

	Pounds.	Dollars
1871	79,195	43,935
1881	14,243	7,392
1891	35,381	18,632
1901	110,961	27,958
1914	72,881	34,379
1915	95,659	58,697
1916	71,515	92,990
1917	17,557	24,170
1918	7,620	10,116
1919	9,556	17,439
1920	35,670	48,948
1921	22,203	22,868
1922	1,362	927
1923	48,783	39,284
1924	88,551	65,867
1925	145,403	125,842
1926	147,411	135,778
1927	182,188	187,444

Wash Blue Containing Ultramarine

	Pounds.	Dollars.
1891	166,327	23,407
1901	454,082	60,279
1914	.....	12,906
1915	.....	6,485
1916	.....	4,997
1917	.....	25,280
1918	.....	15,688
1919	53,703	11,261
1920	134,812	22,955
1921	83,437	17,206
1922	50,835	7,266

Included in "Ultramarine, etc.," after 1922.

Wattle Extract for Tanning

	Pounds.	Dollars.
1924	58,976	1,935
1925	472,028	16,778
1926	222,440	9,208
1927	224,279	9,720

Wax, Mineral or Vegetable

	Pounds.	Dollars.
1881	98,911	12,792
1891	1,486,125	127,159
1901	4,944,891	490,775

Stated separately for later years.

Wax, Mineral

	Pounds.	Dollars
1914	7,974,157	537,684
1915	6,284,757	401,500
1916	2,081,083	141,539
1917	2,054,722	150,241
1918	1,708,514	135,920
1919	2,680,155	313,371
1920	2,717,300	423,468
1921	4,737,396	433,076
1922	10,811,967	524,519
1923	7,974,398	334,741
1924	2,691,250	78,835
1925	4,425,721	272,948
1926	8,032,092	469,530
1927	7,543,995	564,027

Wax, Vegetable

	Pounds.	Dollars.
1914	4,336,276	1,043,337
1915	5,388,398	999,535
1916	9,504,111	1,551,998
1917	7,210,103	1,742,640
1918	8,636,881	2,670,022
1919	8,331,475	3,012,783
1920	9,949,567	3,681,707
1921	6,235,416	1,600,074
1922	7,242,520	1,012,731
1923	9,474,406	1,510,846
1924	8,037,186	1,158,855
1925	7,578,262	1,299,588
1926	7,709,677	1,917,960
1927	9,903,911	2,667,948

White Lead (Basic Carbonate)

	Pounds.	Dollars.
1871	8,337,842	483,392
1881	1,068,057	60,133
1891	628,414	43,041
1901	379,388	21,993
1914	656,884	44,436
1915	514,876	35,743
1916	153,474	11,970
1917	57,045	5,054
1918	887	239
1919	21,153	2,477
1920	33,472	4,724
1921	225,930	24,690
1922	118,119	11,908
1923	324,776	30,563
1924	232,229	21,257
1925	126,151	12,876
1926	311,995	33,495
1927	276,030	25,594

Whiting or Paris White, Dry, Ground and Bolted

	Tons.*	Dollars.
1871	5,219,396	24,710
1881	1,974,913	7,806
1891	1,042,518	4,239
1901	507,745	1,863
1914	2,361,605	10,453
1915	5,387,038	15,705
1916	3,655,123	14,459
1917	2,147,895	11,292
1918	4,908,295	31,033
1919	586,780	5,097
1920	3,639,237	28,610
1921	20,393,338	191,558
1922	22,391,035	114,784
1923	40,446,737	149,636
1924	46,301,120	146,651
1925	46,385,585	153,507
1926	42,999,399	142,075
1927	26,132	160,505

*Quantity stated in pounds prior to 1927.

Witherite

	Pounds.	Dollars.
1891	.....	13,068
1901	.....	15,208
1914	1,223,926	7,927
1915	838,292	6,674
1916	1,714,414	20,446
1917	1,420,752	16,071
1918	1,194,268	20,146
1919	46,468	2,555
1920	1,195,824	22,465
1921	2,516,289	53,748
1922	2,692,290	41,589
1923	2,204,016	24,609
1924	4,283,948	54,978
1925	4,771,174	61,966
1926	6,189,123	76,008
1927	5,060,924	59,067

Worm Gut, Unmanufactured

	Pounds.	Dollars
1924	14,218	116,946
1925	10,307	96,468
1926	12,530	110,893
1927	10,723	105,002

Wood Flour

	Pounds.	Dollars
1914	15,171,972	84,751
1915	11,482,934	60,131
1916	13,731,979	74,479
1917	8,703,664	57,521
1918	3,738,486	43,852
1919	840,000	9,559
1920	2,922,063	41,358
1921	9,442,617	196,176
1922	14,481,469	88,513
1923	10,743,482	70,666
1924	11,757,382	84,475
1925	11,817,024	94,603
1926	14,004,866	97,891
1927	12,361,933	74,021

Xylene

	Pounds.	Dollars.
1925	72,300	2,620
1926	192,590	11,381
1927	288,300	13,813

Xylidin

	Pounds.	Dollars.
1920	56,047	41,237
1921	.....	.....
1922	.....	.....
1923	150	60
1924	.....	.....
1925	.....	.....
1926	.....	.....
1927	.....	.....

Zaffer

	Pounds.	Dollars.
1920	220	14
1921	.....	.....
1922	.....	.....
1923	.....	.....
1924	.....	.....
1925	.....	.....
1926	110	40
1927	.....	.....

Zinc Ores

	Zinc content. Pounds.	Dollars.
1913	25,214,528	526,173
1914	11,762,861	169,986
1915	14,259,176	321,135
1916	81,779,564	3,376,166
1917	293,958,919	8,186,015
1918	31,822,890	580,758
1919	63,636,426	1,347,067
1920	18,965,938	310,515
1921	41,628,246	587,124
1922	88,304,275	653,348
1923	3,904,965	58,610
1924	3,997,144	270,810
1925	746,554	36,803
1926	29,991	2,263
1927	301,225	12,055

Zinc Ashes

	Pounds.	Dollars.
1871	2,075,899	103,493
1881	2,044,778	106,990

Not stated after 1881.

Zinc Chloride

	Pounds.	Dollars.
1901	898,205	28,192
1913	1,252,319	37,078
1914	789,296	25,508
1915	194,250	5,805
1916	12,643	403
1917	6,216	629
1918	197,570	15,381
1919	.....	.....
1920	80,228	7,762
1921	4,054,862	235,274
1922	3,290,928	104,553
1923	1,761,272	65,580
1924	546,239	24,410
1925	823,541	43,792
1926	825,403	41,754
1927	1,240,987	53,246

Zinc Dust

	Pounds.	Dollars.
1913	5,615,766	317,492
1914	4,788,433	223,775
1915	2,278,533	132,822
1916	1,365,705	255,192
1917	522,587	83,618
1918	263,428	25,109
1919	24,982	1,637
1920	98,921	8,066
1921	13,023	2,287
1922	202,066	5,470
1923	46,224	1,977
1924	52,660	4,307
1925	266,595	22,454
1926	33,209	4,013
1927	645	74

Zinc Oxide, Dry

	Pounds.	Dollars.
1912	4,842,948	310,362
1913	6,148,129	389,495
*1914	1,408,162	88,416

* Figures are for July 1 to October 3, 1913. Stated separately after October 3, 1913.

Zinc Oxide, Dry Powder

	Pounds.	Dollars.
1891	2,629,858	136,864
1901	2,831,620	145,823
1914	5,315,867	309,106
1915	2,565,434	148,146
1916	1,441,299	244,934
1917	285,433	65,633
1918	294,736	55,802
1919	132,486	30,346
1920	1,549,644	174,658
1921	1,886,076	171,328
1922	5,521,525	352,018
1923	3,210,097	229,115
1924	2,436,456	176,811
1925	3,538,279	247,748
1926	2,099,143	186,275
1927	2,735,586	221,504

Zinc Oxide, Ground in or Mixed with Oil or Water

	Pounds.	Dollars.
1891	139,371	7,228
1901	53,851	4,182
1914	292,571	21,596
1915	156,451	11,526
1916	66,347	7,187
1917	14,059	1,226
1918	273	57
1919	7,088	1,059
1920	13,571	2,858
1921	89,641	11,009
1922	74,219	11,857
1923	120,674	15,205
1924	211,358	23,586
1925	285,112	29,028
1926	218,358	25,713
1927	186,612	22,925

Zinc Sulphate (White Vitriol)

	Pounds.	Dollars.
1881	12,898	294
1891	.....	.....
1901	32,812	752
1913	23,778	817
1914	107,065	2,178
1915	68,940	1,027
1916	.....	.....
1917	28	44
1918	21	35
1919	221	118
1920	10	19
1921	100,829	3,314
1922	55,679	1,059
1923	28,413	1,771
1924	37,126	2,854
1925	17,988	1,359
1926	94,875	2,784
1927	177,285	6,053

Zinc Sulphide

	Pounds.	Dollars.
1901	1,595,236	47,097
1913	5,163,642	144,812
1914	1,338,999	42,130
1915	283,356	8,979
1916	96,402	7,368
1917	53,587	8,451
1918	7,098	4,535
1919	5,705	1,897
1920	15,271	5,478
1921	69,135	16,918
1922	73,334	5,977
1923	24,086	9,374
1924	8,044	4,562
1925	5,338	4,534
1926	15,947	6,087
1927	42,611	9,100

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Industrial Chemicals: Market Review

Growth and expansion in the industrial chemical industry, tremendous over a dozen years as a result of exhaustive research and more efficient methods of production and distribution, made still greater headway in 1927. It will be recalled that 1925 went down in chemical history as one of the most satisfactory years in point of gross sales, both domestic and foreign, since the war. Prices realized in that year were with few exceptions the best that had been obtained since the years antedating the entrance of the United States into the European conflict. New history was made for the American chemical industry in 1926 when an approach to potential production was justified through a marked advance in consumption which absorbed practically the entire output.

There was another moderate expansion in manufacturing operations during 1927 to keep pace with the growth of industrial operations in such consuming industries as textiles, leather, rayon, paint, laundry, papermaking, automotive production and railroads. The fact that excess capacity, one of the heritages of the war period, was not entirely utilized and that producers exercised great caution not to overproduce, in order that a fair balance might be struck between supply and demand, served to stabilize conditions and minimize the speculative proclivities shown by so many chemical products in the two preceding years.

Comparative Values

The comparison in the subjoined tabulation of Oil, Paint and Drug Reporter price index numbers quarterly over 1927 and 1926, evidences the relative stability in the first and second halves of the year. The index number was off but 0.6 point at the end of the first half, but dropped with such rapidity in the second half as to be down 6.8 points over the year.

1927				
Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
165.2	165.5	164.6	161.4	158.7
1926				
Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
171.3	171.3	168.8	169.4	168.2

Stability in First Quarter

The year divided itself into two distinct phases, in a market sense, with notable stability in the first six months and pronounced weakening in the second half. Business during the first quarter was conducted in so conservative a fashion that such price changes as were made were mostly fractional and resulted, as a general proposition, from accumulations due to vagaries in production or in the import movement. Large shipments of most of the major products were made by manufacturers, particularly in such items as soda ash, caustic soda, bleaching powder, liquid chlorine, brimstone, sulphide of soda, phosphate of soda and others. The contract market for alkalies in the first quarter of the year was a particularly good one, manufacturers making large shipments all round. Buying of blue vitriol for agricultural uses was an important feature of the market in the early stages of the year, and manufacturers were speeding up production to take care of the large demands.

There were numerous fluctuations in the leading metals in the first quarter of the year, all of which provoked strength or weakness in their chemical salts. Toward the end of February foreign glauber's salts started pressing this market in volume, and the first of a series of declines, which persisted throughout the year, made itself felt. However, at just about this period, foreign buying of caustic soda became a conspicuous feature, and with stocks available for export decidedly scant, a 10-point advance was announced for this alkali when designed for foreign shipment.

Some of the leading insecticides, including powdered arsenate of lead, were also subjected to price shading during this period. At no time during the first quarter of the year, however, did spot trade bulk large enough to prompt any special comment. This was because of the extensive producer to consumer movement which was in progress. The keen competition which resulted in drastic reductions in sal ammoniac later on in the year had its origin during the first quarter of the year when the presence of foreign stocks prompted domestic manufacturers to lower their schedules. Advances and declines were pretty well divided during the first quarter. There were a succession of upward revisions in citric acid and the tartar products, as well as in antimony, tin and copper salt, while barium products, calcium chloride, prussiates of potash and soda, salt cake and fluoride of soda, were revised downward moderately.

The call for blue vitriol continued to reach extensive proportions in the second quarter. In addition to voluminous demands from consumers in Maine, California, Pennsylvania, Vancouver and several of the South American countries, there was a call for fair shipments from some of the European countries, particularly Italy and Spain. In consequence, producers made two separate advances, one of 5c. per 100 pounds and another of 10c. per 100 pounds, the final figure being $4.90 to $5 per 100 pounds.

More Strength in Second Quarter

In the early months of the year the expectation was that action toward higher prices would be taken in the case of caustic potash. But when the advance finally did come, early in April, it was more or less of a surprise, as assurances had previously been given that prices might be continued unchanged during the second quarter of the year. The advance of ⅜c. to 7½c. to 8c. per pound was not at once met by the domestic manufacturer, who, however, withdrew from the market, while still taking care of his regular customers. A week later all grades of carbonate of potash were advanced.

Early in April the markets for sal ammoniac began to take on marked irregularity. Competition from the foreign product became much keener, and with demand decidedly below normal and large stocks, both of domestic and foreign white, pressing the market, the domestic producers cut prices May 1 to an extent which put the foreign and the domestic product on the same basis. The gray had been reduced 15c. per 100 pounds earlier in April, this having established the price basis at $6.35 to $7 at works.

Severe competition made itself felt at about this time also in barium products. The chloride was cut $3 to $60 to $62 per ton early in May, and even less was accepted, because manufacturers indicated their willingness to meet foreign competition. Keen competition for business, together with a weakening of the market for metallic lead by ½c. per pound, was responsible for some sharp cuts in the scheduled prices for lead acetate as well as lead arsenate during May. A cut of 1c. per pound in the acetate by one producer early in May was not met by the other manufacturers until later, however.

Although price changes in the general market were quite numerous during April, May and June, advances and declines were again almost equally divided. One of the high lights of the market during May was the announcement of an increase of 13c. per gallon in the price of ethyl acetate. Back of the jump was the fact that producers had long been selling the product at unprofitable prices, as there had been quite a number of successive jumps in prices of alcohol during the preceding six weeks.

A sharp advance in the cost of crude argols led to several successive advances in prices for domestic tartaric acid in the second quarter of the year. Citric acid also received much attention from consumers at this time and prices were advanced substantially. There were various fractional fluctuations in the metal salts at this time, but the net changes over the period were not radical. Not only most of the staples, but a great many of the specialties, were taken in hand during the first quarter of the year, and the prospects for most products seemed to be quite encouraging.

The only cloud on the horizon as warm weather put in its appearance was the curtailment in some of the industries utilizing caustic soda and soda ash. These curtailments had some influence on the size of daily shipments which were being made against regular contracts. This development was not, however, out of seasonal proportions.

As May wore on, further declines showed themselves in glaubers salt, copper chloride, lead arsenate, sulphite of soda, zinc dust, yellow prussiate of potash, potash alum, flouride of soda, arsenic, and antimony. However, these were compensated for by advances in other directions. One important development was an advance in nitrite of soda to 8.15c. to 8.50c. per pound. Potash permanganate also came in for a great deal of attention, leading producers announcing an advance of ½c. per pound in the latter part of May.

Early in June importers of magnesium chloride announced a reduction of $1.50 per ton following lower import costs. This put the market at $32 to $34 per ton, and was the first change which had been made over a lengthy period. It was designed for the purpose of stimulating buying, which usually appears in volume at this season of the year. Free-for-all competition was the rule at about the same time in the barium products, with additional reductions of 50c. per ton announced on the chloride, cutting it to $57.50 to $59 per ton. Since the beginning of June there had been a marked and unusual pick-up in the volume of contract shipments in most chemical products, so that, instead of showing a decline, final shipments for the month of June showed a decided increase.

A lot of miscellaneous small items were taken in hand during the latter part of June and given an unusual impetus, resulting in irregular price fluctuations. Fluorspar declined about $1 per ton, with the enameler's grade selling at $35. On the other hand, tartaric acid was subjected to another sharp upward revision, as production costs had risen in keeping with higher costs of raw materials. Late in June demand for anhydrous ammonia for refrigerating purposes was quite extensive and the market started an advancing trend. Sales of bleaching powder and liquid chlorine also expanded appreciably. Manufacturers were moving large quantities of liquid chlorine into consumption. The month ended with pronounced strength in citric acid as well as in the tartar products, while reactionary tendencies were shown in red arsenic and silicate of soda. The usual fluctuations were seen in the general run of metal salts, but these were mostly fractional.

Outlook at the Half Year

While the first half of the year was thus characterized by but few striking changes at first hand, due to the fact that contracts and forward business had been provided for so that negotiating along these lines was what produced the price swings, the fact remained that a large majority of manufacturers reported substantially increased sales during the first half of the year as compared with the year before. Collections appeared to be nearly as good as they had been at the first of the year, while in the opinion of a majority of leading trade factors the outlook for the last half of the year indicated that conditions would be fully as good as they had been during the first half. It appeared that sales of acids during the first six months of the year had been better in the case of about one-half of the producers, while the other half reported the volume of sales had shown some shrinkage. All camps agreed that collections were good during the first half of the year and that the outlook for the second half was likewise optimistic.

Sales of arsenicals suffered because of the Mississippi floods and while collections continued uniformly good in these products, conditions prevented considerable quantities of insecticides from being used at all during the latter part of the last season and this made for a less favorable outlook. In fact, arsenicals started accumulating to a rather alarming extent in Texas warehouses during the latter half of last year and at the end of the fiscal year (August 31, 1927) there was a carryover of 7,021,219 pounds of calcium arsenate as compared with 2,111,782 pounds the year before, 3,660,429 pounds of powdered lead arsenate, compared with 1,981,133 pounds in 1926, and 1,829,247 pounds of paris green against 1,164,297 pounds the year before. There were 3,760,655 pounds of 99 percent prime white arsenic on hand at the end of August, compared with 3,320,348 pounds on the corresponding date the year before.

Sales of textile chemicals in the first half of the year were well above the records of the year before, but collections did not appear to be quite up to expectations. This same condition appeared to be true in sodas, bleach, and ammonias, although at the half-year mark prospects for the remaining six months of the year did not appear to be so good.

As the market went into the second half of 1927 it became clear that production for the whole year would not vary materially from that in 1926. The trade was encouraged in the belief that two favorable and prosperous years would thus follow each other in the chemical field. Much had been accomplished by domestic manufacturers. They were competing successfully in the field of ammonia chloride and were in control of nitrite of soda through successful selling methods. They were primary factors in chlorate of soda and oxalic acid as well as in prussiates and cyanides. Their standards for copper sulphate were being given recognition the world over, with exports of this item to the Canadian markets and to other points, reaching the largest totals in a great number of years.

One of the notable developments had been the marked expansion of the lacquer industry, which was made possible by the prosecution of intense chemical research directed toward solvents.

An insatiable demand developed for various types of solvents which theretofore were quite useless industrially.

Ethyleneglycol was one of the successful solvents offered to the lacquer industry, as its derivatives can be made to fit any requirement. These developments were an actuality in the face of constant competition from European producers. It was known, for example, that the German dye trust had a productive capacity of some 60 tons of synthetic methanol daily and that considerable quantities of methanol were being exported.

The Germans were also reported to be able to produce synthetic ethyl alcohol at a price which would put the German farmers raising potatoes from which alcohol is made out of business. The German dye trust had, however, agreed with the German government-controlled alcohol monopoly not to produce synthetic ethyl alcohol.

European Cartel Developments

Development of international chemical cartels began to take shape during the summer months. Much thought was being given to this phase of chemical development as a series of comprehensive and rather definite agreements were under negotiation between Germany and England, France, Switzerland, Belgium and Italy. These agreements, it was understood, were to cover all branches of activity, although dyestuffs would be the first commodity considered, as they lent themselves more readily to control. While definite particulars had not yet become available in this market, the new move was regarded by some as primarily designed to crush American export business. Statistics were assembled to prove the soundness of this theory. These showed that in 1926 the total exports of chemicals by Germany, Great Britain and France had amounted to $496,000,000, whereas American exports had only totaled some $171,000,000. In the field of dyes alone the grand total of exports by Germany, Great Britain and France amounted to $56,000,000, whereas, American exports in the same year were barely $6,000,000 worth. Discussions were in progress throughout the summer months and finally toward fall the French and the Germans finally took definite steps toward the establishment of the much discussed international accord or agreement.

Evidently the attitude of European interests in combining was that collectively they might be able to secure some advantage from the United States.

The Franco-German dye agreement was finally ratified December 15 and the statement was made that ultimately other nations were expected to participate. The negotiations to include British interests in the accord ended in a deadlock, but there may be a later revision of the agreement to include the British. At the end of the year Belgian and Swiss manufacturers were also reported to be grooming themselves for entrance into the cartel.

The Summer Situation

The summer months resolved themselves into the usual waiting period in the market for chemicals, but shipments of alkali held up fairly well during June, according to trade leaders. Blue vitriol was also an extremely active product, with large shipments the daily rule. The tin products kept backing and filling in keeping with the fluctuations in the metal. Imported barium chloride developed a rather firm tone early in the summer, and foreign goods were marked up to $60 to $62 per ton, although much of this improvement was subsequently to be lost. The month of July brought declines in carbonate of ammonia, metallic antimony, magnesite, and tin products. Exceptionally favorable conditions seemed to hover over the alkali markets at this time, however, with unusually large shipments the daily rule. Late in July the demand for blue vitriol became so urgent that manufacturers announced a 10c. advance, which established the price at $5 to $5.10 per 100 pounds, car lots. Weather conditions prevailing over the Eastern and Middle Western agricultural areas of the country are such as to make spraying imperative.

More selling pressure appeared toward the first of August in the fluorides, with a reduction of 2c. per pound in the ammonia salt. But red arsenic was showing a stronger undertone with an advance of ½c. to 9½c. to 10c. per pound, while magnesium chloride was up $1, to $33 to $35 per ton. Imported calcined magnesite was off $1 a ton at $33 to $35. An excellent demand persisted during this period for caustic soda, close to 9,500,000 pounds being shipped to foreign countries during May. Toward the end of August, stronger tendencies began to manifest themselves in some of the potash products with an advance of 1c. per pound in both grades of the calcined carbonate. An excellent spot demand was running at this time and the volume of shipments against resting contracts was also substantial.

There had been rather liberal importations of chlorate of potash for a time, and it was hinted in the trade that quoted prices did not always represent the minimum at which stocks could be secured. In fact, foreign goods were pressing the market at a concession of about ½c. per pound from prices quoted for the domestic product. Comment in the trade toward the close of August was that consumption had been quite satisfactorily maintained, and that shipments of alkalies and quite a number of other products had compared quite favorably with those of corresponding preceding periods.

Toward Labor Day the market for sal ammoniac started to show symptoms of weakness. In fact, the gray descriptions were reduced ⅝c. per pound by the domestic manufacturers, the new base quotation being 5.6c. to 5⅞c. per pound in casks, car lots, works. Stocks appeared to be ample at this time and there were evidences of a piling up of stocks in some quarters, as demand was scanty. This was followed by reductions in the white granular varieties to 5.05c. to 5¼c. per pound, casks, car lots, works. The foreign material appeared to be pressing in large volume, however. The competition for business between domestic and foreign factors at this time continued keen and early in September the consumers, in the realization of the attractiveness of offers, became more active buyers.

Price Shading More General

Chemical trading continued along well-defined lines during the greater part of September, with only a comparatively few price changes to be recorded in any quarter of the market. Another cut of ½c. per pound was made in calcined potash carbonate toward the middle of September, and judging from the attitude of sellers at that time, still lower prices might be expected; for demand in general seemed to be well below expectations. The tin and antimony derivatives continued to fluctuate in accordance with scheduled prices for the raw materials, but most of the major products seemed to be holding their own under a rather liberal purchasing movement. Throughout this period there was no let up in active shipments in caustic soda and soda ash. Not much new contract business was being placed, naturally, but this was a seasonal enough condition.

September went out with price shading in many products becoming much more general. The drive against sal ammoniac continued, and toward the end of the month another price cutting war between domestic and foreign producers was in full sway. The end of September brought a decline to 10⅝c. to 10¾c. per pound in metallic antimony, comparing with a high for the year of 15½c. per pound and a low of 10¼c. per pound, and in consequence the needle was cut by producers to a basis of 15c. to 16c. per pound, with oxide off at 1c. at 14½c. to 16c. per pound. There were minor downward revisions also in calcium hydrate, chrome acetate, copper oxide, and the tin products.

Contract Season Opens

October opened with a less brilliant showing as regards spot business, although the manufacturers of most basic products continued to make satisfactory shipments against resting contracts. With the exception of the drastic competition in sal ammoniac, the fall period had been ushered in with valuations quite steadily maintained as a general proposition. Talk was that something might soon be done with reference to 1928 contracts on bleaching powder, chlorine and the alkali products, but nothing definite was done along these lines. Caustic soda at this time was better placed than it had been the year before, there being no accumulation in sight to cause any worriment.

The competition for business between the foreign syndicate and domestic producers became a little keener at about this time, and a cut of $1.50 per ton was made in barium chloride early in October, which lowered prices to $57.50 to $58.50 per ton. The domestic producers had not yet dropped their prices below $60 to $62 per ton, but it was understood they were meeting foreign competition. Weakness in metallic tin caused quite a sharp break in prices of all of the derivatives during the early part of October. With the passage of the season of most active buying in calcium chloride, prices became reactionary, and some substantial cuts were accepted by dealers.

Alkali Contract Prices

During the closing days of October alkali manufacturers came out with their new price schedules for 1928 contract shipments. These showed concessions from prevailing contract prices of 2½c. to 5c. per 100 pounds in the case of light soda ash and 10c. per 100 pounds in solid 76 percent caustic soda in large drums. These prices were put out by only one of the factors, but preparations were under way in other manufacturing quarters to meet the cut. Some interests were disinclined to meet any shading so early in the year, as they were still experiencing good shipments against the contracts outstanding at the higher price basis.

Business against the new contracts was on in fairly liberal volume during the greater part of October, but not all producing interests had taken definite action in the matter of fixing 1928 price levels. Some of the producing interests pointed out that consumers were renewing their contracts as they expired and at the old figures. Export movements were regarded as being quite lively on the whole. The exportations of soda compounds in the first eleven months of the year ending with November totaled 354,076,321, compared with 319,597,295 pounds in the corresponding preceding period.

The contracting movement in caustic soda and soda ash continued in progress throughout November and December, and at the end of the year leading producers stated that buyers of caustic had covered at least 80 percent of their 1928 requirements.

Ammonia Prices Advanced

At the close of the year widespread interest developed in ammonia products, and leading producers made an advance of 1½c. per pound in anhydrous ammonia for 1928 deliveries, the new prices for the Metropolitan territory being on the basis of 13½c. per pound delivered. A detailed schedule of prices covering the entire country was released under which empty cylinders were returnable for credit without charge. The producers of aqua ammonia also named new contract quotations for 1928 at this time, showing an advance of about ¼c. to ½c. per pound over the quotations that had been operative throughout 1927. The new prices were 3c. to 3¼c. per pound for the 26 degrees in drums for round lots and 5¼c. per pound in carboys. Steady gains were shown in demand for refrigerator purposes. Contracting at the above prices for next season's requirements was going on apace as the year came to a close.

Toward the close of the year domestic manufacturers of caustic potash announced a reduction of ⅜c. per pound, bringing the 88-92 percent grade down to 7⅛c. in car lots. This action was wholly unexpected, as at the time it went into effect a soft-coal strike in central Germany had been instrumental in delaying receipts of the foreign product to the extent of several weeks. However, foreign competition was still a factor over 1,000,000 pounds of the material had been imported during the year. Handlers of the foreign product met this cut a week later.

New contract prices for white sal ammoniac came out in the closing days of the year, with a cut of 10c. from the prices that had been operative, the quotation being $4.95 per 100 pounds. Foreign holders quickly followed the schedule. The gray had been neglected until the latter part of November, but keen competition was still in progress and there was a subsequent further downward revision in prices in the first few days of the new year.

At least $5 per ton was lopped off the selling prices for barium chloride in the closing days of the year. Foreign syndicate control made competition keen, and prices finished the year at $48 to $50 per ton for carbonate and $58 to $61 for chloride. Weakness in metallic tin was quite pronounced at the close of the year, the price sinking to 56⅜c. per pound, comparing with a high for the year of 71c. and a low of 56¼c. This resulted in a number of downward revisions in bichloride, crystals, oxide, and tetrachloride.

The announcement of new automobile models attracted considerable interest during December. It was believed that increasing manufacturing in the automotive field would lead to better outlets for a great many chemical products. The last few days of December were marked by generally conservative buying because of the impending inventory period. The market was featured by stability at this time, and the only fluctuations that came under review were $1 a ton advance in copperas, a cut of 1½c. per pound in imported tartaric acid, and one of ¼c. per pound in ammonia carbonate, with slight concessions in needle antimony and sodium nitrite.

Acids

The prevailing satisfactoriness of industrial conditions during 1927 led to an enormous expansion in volume of business in practically every one of the leading mineral acids. During the closing days of October the principal manufacturers were quite generally forced to revise prices for muriatic, nitric, and sulphuric to higher levels because of increasing cost of production occasioned by higher raw materials and constant increase of cost of doing business. The new range on battery acid adopted at this time was about 10c. to 80c. per 100 pounds higher than the levels that had prevailed earlier in the year. The advance in muriatic acid amounted to 5c. to 80c. per 100 pounds. In the case of sulphuric acid, which was affected by an advance of 10 points in commercial

1928

THE

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OF THE

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Manufacturers of
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BOSTON, MASS.

sulphur announced December 12, the advance amounted about 50c. per ton, both in the 60 and 66 degrees.

Comparative Values

The remarkable stability of the market during the last three quarters of 1927 was of considerable interest. In the first quarter of the year the gradual advances which were taking place in citric and tartaric acids as a result of higher crude materials and in consequence of steadily expanding demands from soft drink manufacturers were incidental in elevating the average of prices obtained. While consumption of acetic acid was going on apace in the industries, prices held like a rock throughout the year on a basis of $11.90 per 100 pounds because of the strict maintenance of the raw material acetate of lime on a $3.50 per 100 pounds basis throughout the year. The subjoined table of Oil, Paint and Drug Reporter weighted index numbers for the four quarters of the year as well as for December 31 gives some idea of the stability achieved in values throughout the year:—

1927				
Jan. 1.	Apr. 1.	July 1.	Oct. 1.	Dec. 31.
106.3	108.1	109.1	109.1	109.0

Prices were established at an almost uniform advance of 3 points over the records of the year before, as shown below:—

1926				
Jan. 1.	Apr. 1.	July 1.	Oct. 1.	Dec. 31.
106.2	106.0	107.1	107.3	106.1

Foreign Shipments Gain

Foreign buying of sulphuric acid was not as extensive last year as it had been the year before, shipments in the first eleven months of the year aggregating but 7,000,000 pounds, in contrast with 8,500,000 pounds in 1926. Exports of other acids and anhydrides made total shipments for the period 12,134,158 pounds, compared with 14,660,771 pounds. Besides the extensive domestic production in progress in most acids, huge quantities were brought in from the other side and were usually disposed of with but slight difficulty. For example, importations of tartaric acid in the first eleven months of 1927 totaled some 2,587,589 pounds, against 1,486,292 pounds in the year before. Imports of citric acid in the first eleven months of the year were 113,904 pounds, compared with 137,984 pounds.

Formic acid was still competing strenuously with acetic acid for favor, and in the first eleven months of the year total importations amounted to 1,722,868 pounds, compared with 1,464,900 pounds. Imports of arsenous acid (white arsenic) occasioned some concern among domestic producers, totaling in the first eleven months of the year 24,088,745 pounds, compared with 15,163,169 pounds the year before.

Citric and Tartaric

Citric acid sold at 45½c. per pound in kegs during the height of the heavy consuming movement in the summer months. In the last three months of the year domestic producers cut the price 1c. per pound, although they still had the market to themselves so far as foreign competition was concerned, for the 120,000 pounds that were being carried in licensed warehouses during the fall months could not be brought out of bond to compete successfully with the domestic product, as it would cost as high as 53c. per pound duty paid. Even the action of the Italian camera in the closing days of the year in boosting prices for citrate of lime to 520 lira per quintal for 64 percent acid at its warehouse failed to have any influence on prices, as the bulk of the raw material for domestic manufacturing was being imported from the West Indies. The actual cost of importing the Italian acid in lots of 10,000 kilos was 36c. per pound, c.i.f., and the duty is 17c.

Tartaric acid was a little better placed so far as foreign competition was concerned. It started the year at basis of 27¾c. per pound for the crystals, but a succession of advances, started early in the year, resulted in a total gain of close to 10c. per pound. The market closed the year showing a net advance of about 9c. per pound. The cost of importing foreign acid was computed at 28c. per pound in 10-ton lots during the fall months, which, with the 6c. duty, made the laid down cost 34c. per pound.

Domestic producers had no particular fault to find at any stage of the year with the volume of business consummated in oxalic acid. The imports of foreign acid in the first eleven months of the year reached a total of 1,722,868 pounds, compared with 1,464,900 pounds the year before, but domestic producers were enjoying good inquiries and steadily adhered to a basis of 11c. to 11½c. per pound in barrels throughout the year.

A bit of irregularity sometimes showed itself in the market for lactic acid, and manufacturers' prices were not always adhered to. Textile and solvents manufacturers took regular quotas of acetic. Salicylic was not affected by the action of the President in reducing the duty on phenol under the sliding provisions of the tariff act, and business in it continued uniformly good throughout the year. Chromic acid met good demand from electroplaters and prices were well maintained.

At the close of the year it was said that manufacturing consumers had just about completed contracting for their supplies of tartaric acid for 1928. It was also clear that the amount of contracting which had been done in the mineral acids had eclipsed the records of the year before and that enough business was on the books of the producers to keep them fully engaged during 1928.

Industrial Chemicals: Record of Prices

Alum, Ammonia, Lump

October 18, 1871, the price was $2.15 per 100 pounds; 1881, $2.15; 1891, $1.50; 1901, $1.75; 1911, $1.75; 1913, $1.75; 1918, September, $8.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$3.50	$3.50	$3.35	$3.35
February	3.50	3.50	3.35	3.35
March	3.50	3.50	3.35	3.35
April	3.40	3.40	3.35	3.35
May	3.35	3.35	3.35	3.35
June	3.35	3.35	3.35	3.35
July	3.35	3.35	3.35	3.35
August	3.35	3.35	3.35	3.35
September	3.35	3.35	3.35	3.35
October	3.35	3.35	3.45	3.25
November	3.35	3.35	3.25	3.25
December	3.35	3.35	3.25	3.25
Year	3.50	3.35	3.45	3.25

Aluminum Sulphate, Commercial

August 20, 1894, the price was $1.25 per 100 pounds; 1901, $1.35; 1911, 90c.; 1913, 90c.; 1917, November, $3.50.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.40	$1.40	$1.40	$1.40
February	1.40	1.40	1.40	1.40
March	1.40	1.40	1.40	1.40
April	1.40	1.40	1.40	1.40
May	1.40	1.40	1.40	1.40
June	1.40	1.40	1.40	1.40
July	1.40	1.40	1.40	1.40
August	1.40	1.40	1.40	1.40
September	1.40	1.40	1.40	1.40
October	1.40	1.40	1.40	1.40
November	1.40	1.40	1.40	1.40
December	1.40	1.40	1.40	1.40
Year	1.40	1.40	1.40	1.40

Aluminum Sulphate, Iron-Free

August 20, 1894, the price was $1.75 per 100 pounds; 1901, $1.75; 1911, $1.75; 1913, $1.25; 1918, October, $4.50.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.00	$2.00	$2.00	$2.00
February	2.00	2.00	2.00	2.00
March	2.00	2.00	2.00	2.00
April	2.00	2.00	2.00	2.00
May	2.00	2.00	2.00	2.00
June	2.00	2.00	2.00	2.00
July	2.00	2.00	2.00	2.00
August	2.00	2.00	2.00	2.00
September	2.00	2.00	2.00	2.00
October	2.00	2.00	2.00	2.00
November	2.00	2.00	2.00	2.00
December	2.00	2.00	2.00	2.00
Year	2.00	2.00	2.00	2.00

Ammonia, Aqua, 26 Degrees

October 18, 1871, the price was 10¼c. to 11c. per pound; 1881, 9½c.; 1891, 9½c.; 1901, 5½c.; 1911, 4¾c.; 1913, 4¾c.; 1918, May, 30c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.03½	$0.03½	$0.02¾	$0.02¾
February	.03½	.03½	.02¾	.02¾
March	.03½	.03½	.02¾	.02¾
April	.03½	.03½	.02¾	.02¾
May	.03½	.03½	.02¾	.02¾
June	.03½	.03½	.02¾	.02¾
July	.03¼	.03¼	.02¾	.02¾
August	.03¼	.03¼	.02¾	.02¾
September	.03¼	.03¼	.02¾	.02¾
October	.03¼	.03	.02¾	.02¾
November	.03	.02¾	.03¼	.02¾
December	.02¾	.02¾	.03¼	.03
Year	.03½	.02¾	.03¼	.02¾

Ammoniac, Sal, Lump

October 18, 1871, the price was 10c. to 10¼c. per pound; 1881, 11c. to 12c.; 1891, 8¼c. to 8¾c.; 1901, 5¾c. to 6c.; 1911, 4¾c. to 6¼c.; 1917, July, 22c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12	$0.12	$0.11½	$0.11½
February	.12	.11½	.11½	.11½
March	.11½	.11½	.11½	.11½
April	.11½	.11½	.11½	.11½
May	.11½	.11	.11½	.11½
June	.11	.11	.11½	.11
July	.11	.11	.11	.11
August	.11	.11	.11	.11
September	.11½	.11	.11	.11
October	.11½	.11½	.11	.11
November	.11½	.11½	.11	.10½
December	.11½	.11½	.11	.10½
Year	.12	.11	.11½	.10½

Antimony, Needle

October 18, 1871, the price was 11¼c. per pound; 1881, 10¾c.; 1891, 8¼c.; 1901, 7¾c.; 1911, 5½c.; 1913, 4½c.; 1917, January, 20c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.23	$0.21	$0.14	$0.13
February	.22½	.21¼	.13	.12
March	.17	.16	.12	.12
April	.16	.16	.12	.12
May	.16	.12	.15	.12
June	.13	.12	.15	.15
July	.15	.13	.15	.15
August	.15	.15	.15	.15
September	.15	.15	.15	.15
October	.15	.14	.16	.13
November	.14	.14	.13	.13
December	.14	.13	.13	.13
Year	.23	.12	.16	.12

Argols, Crude, 30 Percent

October 18, 1871, the price was 6c. per pound; 1881, 4½c.; 1891, 2¾c.; 1901, 2¼c.; 1913, 3c.; 1915, January, 18c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05½	$0.05½	$0.03	$0.03
February	.05½	.05½	.03	.03
March	.05½	.05½	.03	.03
April	.05½	.03	.07	.06
May	.03	.03	.08	.07
June	.03	.03	.08	.08
July	.03	.03	.08	.08
August	.03	.03	.08	.08
September	.03	.03	.08	.08
October	.03	.03	.08	.08
November	.03	.03	.08	.08
December	.03	.03	.08	.08
Year	.05½	.03	.08	.03

Arsenic, Red

October 18, 1871, the price was 5½c. per pound; 1881, 5¾c.; 1891, 5c.; 1901, 7c.; 1911, 6¾c.; 1913, 5¾c.; 1916, December, 70c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12	$0.12	$0.10¼	$0.10½
February	.12	.12	.10½	.09¾
March	.12	.11¾	.09¾	.09¼
April	.11¾	.11¾	.09¼	.09¼
May	.11¾	.11½	.09¼	.09¼
June	.11½	.11	.09¾	.09¼
July	.11	.11	.09¼	.09¼
August	.11	.11	.09¾	.09
September	.11	.10½	.09¾	.09¼
October	.10½	.10¼	.09¼	.09
November	.10¼	.10½	.09	.09
December	.10½	.10¼	.09	.09
Year	.12	.10½	.10½	.09

Bleaching Powder

October 18, 1871, the price was $3.50 per 100 pounds; 1881, $1.07; 1891, $2.25; 1901, $1.75; 1911, $1.50; 1913, $1.25; 1916, January, $14.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.00	$2.00	$2.00	$2.00
February	2.00	2.00	2.00	2.00
March	2.00	2.00	2.00	2.00
April	2.00	2.00	2.00	2.00
May	2.00	2.00	2.00	2.00
June	2.00	2.00	2.00	2.00
July	2.00	2.00	2.00	2.00
August	2.00	2.00	2.00	2.00
September	2.00	2.00	2.00	2.00
October	2.00	2.00	2.00	2.00
November	2.00	2.00	2.00	2.00
December	2.00	2.00	2.00	2.00
Year	2.00	2.00	2.00	2.00

Brimstone

October 18, 1871, the price was $33.50 per ton; 1881, $31 to $32; 1891, $29 to $30; 1901, $24 to $28; 1911, $22 to $22.50; 1913, $22; 1917, February, $45.

(Price at Mines)

Per ton

	1926. H.	1926. L.	1927. H.	1927. L.
January	$17.00	$17.00	$18.00	$18.00
February	17.00	17.00	18.00	18.00
March	19.00	17.00	18.00	18.00
April	19.00	19.00	18.00	18.00
May	19.00	19.00	18.00	18.00
June	19.00	19.00	18.00	18.00
July	19.00	19.00	18.00	18.00
August	19.00	19.00	18.00	18.00
September	19.00	19.00	18.00	18.00
October	19.00	19.00	18.00	18.00
November	19.00	18.00	18.00	18.00
December	18.00	18.00	18.00	18.00
Year	19.00	17.00	18.00	18.00

Arsenic, White

October 18, 1871, the price was 1⅞c. per pound; 1881, 2¾c. to 3¼c.; 1891, 2¾c. to 3c.; 1901, 3¾c. to 3⅞c.; 1911, 2¼c. to 2⅝c.; 1913, 3½c.; 1917, May, 20c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.03½	$0.03½	$0.03½	$0.03½
February	.03½	.03½	.03¾	.03½
March	.03½	.03½	.03¾	.03¼
April	.03½	.03½	.03¾	.03¾
May	.03½	.03½	.03¾	.03¾
June	.03½	.03½	.03¾	.03¾
July	.03½	.03½	.03¾	.03¾
August	.03½	.03½	.03¾	.03¾
September	.03½	.03½	.04	.04
October	.03½	.03½	.04	.04
November	.03½	.03½	.04	.04
December	.03½	.03½	.04	.04
Year	.03½	.03½	.04	.03¼

Twenty-one Years' Prices

	H.	L.
1907	$0.08¼	$0.05¾
1908	.06	.03
1909	.03¼	.02¾
1910	.03¼	.02¼
1911	.02¾	.01½
1912	.05½	.02¾
1913	.05	.03
1914	.05	.02¾
1915	.04½	.03½
1916	.08¼	.03⅞
1917	.20	.08
1918	.17½	.09
1919	.12	.08
1920	.16¼	.10½
1921	.10¼	.05½
1922	.15½	.05½
1923	.16	.09¾
1924	.13½	.06
1925	.06¼	.03½
1926	.03½	.03½
1927	.04	.03¼

Barium, Chloride

August 20, 1906, the price was $33.50 per ton; October 18, 1911, $31.50; 1913, 33; 1916, February, $140.

Per ton

	1926. H.	1926. L.	1927. H.	1927. L.
January	$65.00	$60.00	$61.00	$61.00
February	61.00	60.00	61.00	61.00
March	63.00	60.00	61.00	58.00
April	63.00	63.00	58.00	58.00
May	63.00	63.00	58.00	58.00
June	63.00	63.00	58.00	58.00
July	63.00	63.00	58.00	58.00
August	63.00	63.00	60.00	58.00
September	63.00	63.00	59.50	59.00
October	63.00	63.00	60.00	57.50
November	63.00	63.00	60.00	56.00
December	63.00	61.00	56.00	50.00
Year	65.00	60.00	61.00	50.00

Calcium Arsenate

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.07	$0.07	$0.07½	$0.07½
February	.07	.07	.07½	.07½
March	.07	.07	.07½	.07½
April	.07	.07	.07½	.07½
May	.07	.07	.07½	.07½
June	.07½	.07	.07½	.07½
July	.07½	.07½	.07½	.07½
August	.07½	.07½	.07½	.07½
September	.07½	.07½	.07½	.07
October	.08	.07½	.07	.06½
November	.07½	.07½	.06½	.06½
December	.07½	.07½	.06½	.06½
Year	.08	.07	.07½	.06½

Calcium Carbide

In 1900, when first introduced on a large scale, the price was $5.50 per 100 pounds; 1918, July, $16.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$5.50	$5.50	$5.00	$5.00
February	5.50	5.50	5.00	5.00
March	5.50	5.00	5.00	5.00
April	5.00	5.00	5.00	5.00
May	5.00	5.00	5.00	5.00
June	5.00	5.00	5.00	5.00
July	5.00	5.00	5.00	5.00
August	5.00	5.00	5.00	5.00
September	5.00	5.00	5.00	5.00
October	5.00	5.00	5.00	5.00
November	5.00	5.00	5.00	5.00
December	5.00	5.00	5.00	5.00
Year	5.50	5.00	5.00	5.00

Carbon Tetrachloride

In January, 1911, the price was 7½c. per pound; October 18, 1913, 7¾c.; 1918, October, 45c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.06¾	$0.06½	$0.06¾	$0.06¾
February	.06½	.06½	.06¾	.06¾
March	.06½	.06¼	.06¾	.06¾
April	.06¼	.06¼	.06¾	.06¾
May	.06½	.06¾	.06¾	.06¾
June	.06¼	.06¾	.06¾	.06¾
July	.06¼	.06¼	.06¾	.06¾
August	.06¼	.06¾	.06¾	.06¾
September	.06¼	.06¼	.06¾	.06¾
October	.06¾	.06¾	.06¾	.06¾
November	.06¾	.06¾	.06¾	.06¾
December	.06¾	.06¾	.06¾	.06¾
Year	.06¾	.06¼	.06¾	.06¾

Chlorine, Liquid

In 1907, when it was first introduced, the price was 25c. per pound; October 18, 1911, 15c.; 1918, June, 22c.

(In tanks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.04	$0.04	$0.04	$0.04
February	.04	.04	.04	.04
March	.04	.04	.04	.04
April	.04	.04	.04	.04
May	.04	.04	.04	.04
June	.04	.04	.04	.04
July	.04	.04	.04	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04	.04
November	.04	.04	.04	.04
December	.04	.04	.04¼	.04
Year	.04	.04	.04¼	.04

Blue Vitriol, 99 Percent
(Copper Sulphate)

October 18, 1871, the price was $10.50 per 100 pounds; 1881, $6.50 to $7; 1891, $3.50 to $3.75; 1901, $4.75 to $4.90; 1911, $4.50 to $4.75; 1913, $5; 1916, January, $23.

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$4.40	$4.40	$4.80	$4.80
February	4.45	4.40	4.80	4.80
March	4.45	4.45	4.80	4.80
April	4.75	4.45	4.90	4.80
May	4.75	4.75	4.90	4.90
June	4.85	4.75	4.90	4.90
July	4.85	4.85	4.90	4.90
August	4.90	4.90	5.00	5.00
September	4.90	4.80	5.00	5.00
October	4.80	4.80	5.00	5.00
November	4.80	4.80	5.00	5.00
December	4.80	4.80	5.00	5.00
Year	4.90	4.40	5.00	4.80

Copperas
(Iron Sulphate)

October 18, 1871, the price was $8.50 per 100 pounds; 1881, 60c.; 1891, 80c.; 1901, 30c.; 1911, 60c.; 1913, 70c.; 1918, December, $2.50.

Per ton

	1926. H.	1926. L.	1927. H.	1927. L.
January	$12.00	$12.00	$13.00	$13.00
February	12.00	12.00	13.00	13.00
March	12.00	12.00	13.00	13.00
April	13.00	12.00	13.00	13.00
May	12.00	11.00	13.00	13.00
June	11.00	11.00	13.00	13.00
July	13.00	11.00	13.00	13.00
August	13.00	13.00	13.00	13.00
September	13.00	13.00	13.00	13.00
October	13.00	13.00	13.00	13.00
November	13.00	13.00	13.00	13.00
December	13.00	13.00	13.00	13.00
Year	13.00	11.00	13.00	13.00

Ethyl Acetate, Technical

(In tanks)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.85	$0.80	$0.72	$0.72
February	.80	.80	.72	.72
March	.80	.80	.72	.72
April	.80	.78	.72	.72
May	.78	.78	.85	.72
June	.78	.78	.85	.85
July	.78	.78	.85	.85
August	.78	.72	.85	.85
September	.72	.72	.85	.85
October	.72	.72	.85	.85
November	.72	.72	.85	.85
December	.72	.72	.85	.85
Year	.85	.72	.85	.72

Fluorspar, Washed Gravel, 85 Percent

December 16, 1918, the price was $90 per ton.

Per ton

	1926. H.	1926. L.	1927. H.	1927. L.
January	$21.00	$21.00	$22.00	$22.00
February	21.00	21.00	22.00	22.00
March	21.00	21.00	22.00	22.00
April	22.00	22.00	22.00	22.00
May	22.00	22.00	22.00	22.00
June	22.00	22.00	22.00	22.00
July	22.00	22.00	22.00	22.00
August	22.00	22.00	22.00	22.00
September	22.00	22.00	22.00	22.00
October	22.00	22.00	22.00	22.00
November	22.00	22.00	22.00	22.00
December	22.00	22.00	22.00	22.00
Year	22.00	21.00	22.00	22.00

Glauber's Salt

October 18, 1871, the price was $2.10 per 100 pounds; 1881, $1.10; 1891, $1.15; 1901, 90c.; 1911, 75c.; 1913, 60c.; 1918, July, $3

Per 100 pounds

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.75	$0.75	$0.85	$0.85
February	.75	.75	.85	.80
March	.85	.75	.80	.80
April	.85	.85	.80	.80
May	.85	.85	.80	.75
June	.80	.80	.75	.70
July	.80	.80	.70	.70
August	.80	.80	.70	.70
September	.70	.70	.70	.70
October	.70	.70	.70	.70
November	.85	.70	.70	.70
December	.90	.85	.70	.70
Year	.90	.70	.85	.70

MERCK & CO.

INC.

MANUFACTURING CHEMISTS

SUCCESSORS TO

POWERS-WEIGHTMAN-ROSENGARTEN CO.

Philadelphia New York **RAHWAY, N. J.** St. Louis Montreal

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Acid Carbolic
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Bismuth Salts
Bromides
Caffeine
Carbon Disulphide
Carbon Tetrachloride
Chloral Hydrate
Chloroform
Cocaine and Salts
Codeine and Salts
Ether
Formin (Hexamethylenamine)
Hydroquinone
Iodides
Lanum (Adeps Lanae)
Mercurials
Milk Sugar
Morphine and Salts
Quinine and Salts
Salicylates
- ACID ACETYLSALICYLIC
- ACID SALICYLIC
- METHYL SALICYLATE
- SODIUM SALICYLATE
- SALOL
- MINOR SALICYLATES

Silver Nitrate
Sulphocarbolates
Strychnine and Salts
Vanillin
Zinc Stearate

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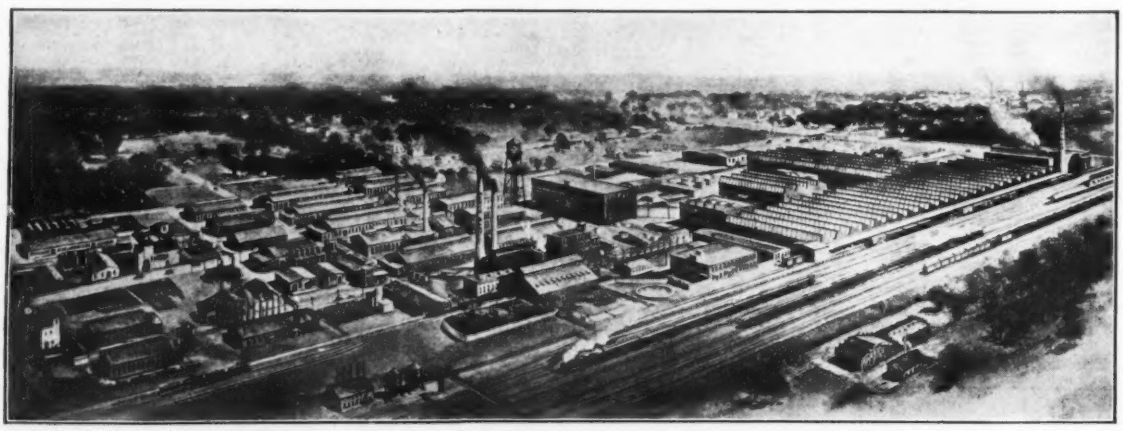

Main Office and Works of Merck & Co. Inc. at Rahway, N. J.

Lead, Acetate, Brown, Broken

October 18, 1871, the price was 10¾c. per pound; 1881, 8½c.; 1891, 6¼c.; 1901, 6c.; 1911, 7¾c.; 1913, 7¾c.; 1918, March, 17c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13½	$0.13½	$0.13	$0.13
February	.13½	.13½	.13	.13
March	.13½	.13½	.13	.13
April	.13½	.13	.13	.13
May	.13	.13	.13	.12
June	.13	.13	.12	.12
July	.13	.13	.12	.12
August	.13	.13	.12	.12
September	.13	.13	.12	.12
October	.13	.13	.12	.12
November	.13	.13	.12	.12
December	.13	.13	.12	.12
Year	.13½	.13	.13	.12

Lime, Acetate

In 1871 the price was $6.35 per 100 pounds; 1881, $3.60; 1891, $1.90; 1901, $1.55; 1913, $2; 1916, January, $7.05.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.25	$3.25	$3.50	$3.50
February	3.25	3.25	3.50	3.50
March	3.25	3.25	3.50	3.50
April	3.25	3.25	3.50	3.50
May	3.25	3.25	3.50	3.50
June	3.25	3.25	3.50	3.50
July	3.25	3.25	3.50	3.50
August	3.25	3.25	3.50	3.50
September	3.25	3.25	3.50	3.50
October	3.25	3.25	3.50	3.50
November	3.50	3.25	3.50	3.50
December	3.50	3.50	3.50	3.50
Year	3.50	3.25	3.50	3.50

Twenty-three Years' Prices

	Per 100 pounds	
	H.	L.
1905	$2.35	$2.00
1906	2.40	2.35
1907	2.55	2.25
1908	2.30	1.50
1909	2.05	1.50
1910	2.05	2.00
1911	2.05	1.75
1912	2.55	2.25
1913	2.55	2.00
1914	2.05	1.50
1915	6.10	2.00
1916	7.05	3.50
1917	6.05	3.50
1918	6.05	3.00
1919	3.05	2.00
1920	3.50	2.00
1921	2.00	1.50
1922	3.50	1.75
1923	4.00	3.50
1924	4.00	3.00
1925	3.25	2.75
1926	3.50	3.25
1927	3.50	3.50

Nickel Salt, Single

September 11, 1801, the price was 15c. per pound; October 18, 1901, 10½c.; 1911, 13c.; 1913, 12c.; 1918, September, 17c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10½	$0.10½	$0.10½	$0.10½
February	.10½	.10½	.10½	.10½
March	.10½	.10½	.10½	.10½
April	.10½	.10½	.10½	.10½
May	.10½	.10½	.10¼	.10½
June	.10½	.10½	.10½	.10½
July	.10½	.10½	.10½	.10½
August	.10½	.10½	.10½	.10½
September	.10½	.10½	.10½	.10½
October	.10½	.10½	.10½	.10½
November	.10½	.10½	.10½	.10½
December	.10½	.10½	.10½	.10½
Year	.10½	.10½	.10½	.10½

Phosphorus, Red

October 18, 1871, the price was $1.15 per pound; 1881, 58c.; 1891, 60c.; 1911, 60c.; 1913, 50c.; 1918, January, $1.70.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.70	$0.70	$0.65	$0.65
February	.70	.70	.65	.65
March	.70	.70	.65	.65
April	.70	.70	.65	.65
May	.65	.60	.65	.65
June	.60	.60	.65	.60
July	.60	.60	.60	.60
August	.60	.60	.60	.60
September	.65	.60	.65	.60
October	.65	.65	.60	.60
November	.65	.65	.60	.60
December	.65	.65	.60	.60
Year	.70	.60	.65	.60

Phosphorus, Yellow

October 18, 1871, the price was $1.10 per pound; 1881, 55c.; 1891, 60c.; 1901, 45c.; 1911, 45c.; 1913, 45c.; 1918, January, $2.10.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.32½	$0.32½	$0.32	$0.32
February	.32½	.32½	.32	.32
March	.32½	.32½	.32	.32
April	.32½	.32½	.32	.32
May	.32½	.32½	.32	.32
June	.32½	.32½	.32	.32
July	.32½	.32½	.32	.32
August	.32½	.32	.32	.32
September	.32	.32	.32	.32
October	.32	.32	.32	.32
November	.32	.32	.32	.32
December	.32	.32	.32	.32
Year	.32½	.32	.32	.32

Potash, Carbonate, Calcined, 80 to 85 Percent

October 18, 1871, the price was 15c. per pound; 1881, 6½c.; 1891, 5c.; 1901, 4¼c.; 1911, 3¼c.; 1913, 3¼c.; 1917, November, 70c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06	$0.06	$0.05½	$0.05¼
February	.06	.06	.05½	.05½
March	.06	.05¾	.05½	.05½
April	.05¾	.05¾	.05¾	.05½
May	.05¾	.05¾	.05¾	.05¾
June	.05¾	.05¾	.05¾	.05¾
July	.05¾	.05¾	.05¾	.05¾
August	.05¾	.05¾	.05¾	.05¾
September	.05¾	.05¾	.05¾	.0515
October	.05¾	.05¾	.05¾	.05¾
November	.05¾	.05¾	.05¾	.05¾
December	.05¾	.05¼	.05¾	.05¾
Year	.06	.05¼	.05¾	.0515

Potash, Caustic, 88 to 92 Percent

October 18, 1871, the price was 7¼c. per pound; 1881, 6c.; 1901, 6¾c.; 1901, 6c.; 1911, 3¾c.; 1913, 4c.; 1916, February, $1.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07¼	$0.07¼	$0.07¼	$0.07¼
February	.07¼	.07¼	.07¼	.07¼
March	.07¼	.07¼	.07¼	.07¼
April	.07¼	.07¼	.07¼	.07¼
May	.07¼	.07¼	.07¼	.07¼
June	.07¼	.07¼	.07½	.07½
July	.07¼	.07¼	.07½	.07½
August	.07¼	.07¼	.07½	.07½
September	.07¼	.07¼	.07½	.07½
October	.07¼	.07¼	.07½	.07½
November	.07¼	.07¼	.07¼	.07¼
December	.07¼	.07¼	.07¼	.07¼
Year	.07¼	.07¼	.07½	.07¼

Potash, Chlorate

October 18, 1871, the price was 55c. per pound; 1881, 15⅝c.; 1891, 10⅞c.; 1901, 8¼c.; 1911, 8¼c.; 1913, 8¼c.; 1916, March, 75c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08¼	$0.08¼	$0.08	$0.08
February	.08¼	.08¼	.08	.08
March	.08¼	.08	.08	.08
April	.08	.08	.08	.08
May	.08¼	.08	.08	.08
June	.08¼	.08¼	.08	.08
July	.08¼	.08¼	.08	.08
August	.08¼	.08¼	.08	.07½
September	.08¼	.08¼	.07½	.07½
October	.08¼	.08	.07½	.07½
November	.08	.08	.07½	.07½
December	.08	.08	.07½	.07½
Year	.08¼	.08	.08	.07½

Potash, Permanganate, Technical

In 1901 the price was 9c. to 11c.; October 18, 1911, 8¾c.; 1913, 9¾c.; 1918, September, $2.25.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.14½	$0.14½	$0.14	$0.14
February	.14½	.14½	.14	.14
March	.14½	.14½	.14	.13½
April	.14½	.14½	.13½	.13½
May	.14½	.14½	.14	.13½
June	.14½	.14½	.14	.14
July	.14½	.14½	.14	.14
August	.14½	.14½	.14½	.14
September	.14½	.14	.14	.14
October	.14	.14	.15	.15
November	.14	.14	.15	.15
December	.14	.14	.15	.15
Year	.14½	.14	.15	.13½

Salt Cake, Ground

In October, 1881, the price was $18 per ton; October 18, 1891, $15; 1901, $15; 1911, $12; 1913, $11.50; 1920, August, $80.

(In barrels)

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$20.00	$20.00	$21.00	$21.00
February	20.00	20.00	21.00	21.00
March	20.00	20.00	21.00	21.00
April	20.00	20.00	21.00	21.00
May	20.00	20.00	21.00	21.00
June	20.00	20.00	21.00	21.00
July	20.00	20.00	21.00	21.00
August	20.00	20.00	21.00	21.00
September	20.00	20.00	21.00	21.00
October	20.00	20.00	21.00	21.00
November	20.00	20.00	21.00	21.00
December	20.00	20.00	21.00	21.00
Year	20.00	20.00	21.00	21.00

Saltpeter, Crystals

September 16, 1879, the price was 6c. per pound; October 18, 1881, 7c.; 1891, 6¾c.; 1901, 4¼c.; 1911, 4¾c.; 1913, 6½c.; 1916, January, 38c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07¼	$0.07¼	$0.07¼	$0.07¼
February	.07¼	.07¼	.07¼	.07¼
March	.07¼	.07¼	.07¼	.07¼
April	.07¼	.07¼	.07¼	.07¼
May	.07¼	.07¼	.07¼	.07¼
June	.07¼	.07¼	.07¼	.07¼
July	.07¼	.07¼	.07¼	.07¼
August	.07¼	.07¼	.07¼	.07¼
September	.07¼	.07¼	.07¼	.07¼
October	.07¼	.07¼	.07¼	.07¼
November	.07¼	.07¼	.07¼	.07¼
December	.07¼	.07¼	.07¼	.07¼
Year	.07¼	.07¼	.07¼	.07¼

Soda Ash, Light, 58 Percent

October 18, 1871, the price was $2.70 per 100 pounds; 1881, $1.50; 1891, $1.60; 1901, 85c.; 1911, 80c.; 1913, 85c.; 1916, February, $4.50.

(In bags)

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.38	$1.38	$1.32½	$1.32½
February	1.38	1.38	1.32½	1.32½
March	1.38	1.38	1.32½	1.32½
April	1.38	1.38	1.32½	1.32½
May	1.38	1.38	1.32½	1.32½
June	1.38	1.38	1.32½	1.32½
July	1.38	1.38	1.32½	1.32½
August	1.38	1.38	1.32½	1.32¼
September	1.38	1.38	1.32½	1.32½
October	1.38	1.38	1.32½	1.32½
November	1.38	1.32½	1.32½	1.32½
December	1.32½	1.32½	1.32½	1.32½
Year	1.38	1.32½	1.32½	1.32½

Soda, Bicarbonate

October 18, 1871, the price was $4.50 per 100 pounds; 1881, $3.70; 1891, $3.25; 1901, 95c.; 1911, $2.75; 1913, $1; 1918, October, $4.50.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.90	$1.90	$1.90	$1.90
February	1.90	1.90	1.90	1.90
March	1.90	1.90	1.90	1.90
April	1.90	1.90	1.90	1.90
May	1.90	1.90	1.90	1.90
June	1.90	1.90	1.90	1.90
July	1.90	1.90	1.90	1.90
August	1.90	1.90	1.90	1.90
September	1.90	1.90	1.90	1.90
October	1.90	1.90	1.90	1.90
November	1.90	1.90	1.90	1.90
December	1.90	1.90	1.90	1.90
Year	1.90	1.90	1.90	1.90

Soda, Caustic, 76 Percent Solid

October 18, 1871, the price was $4.88 per 100 pounds; 1881, $3.75; 1891, $1.55; 1901, $1.95; 1911, $1.80; 1913, $1.75; 1917, September, $10.70.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.10	$3.10	$3.00	$3.00
February	3.10	3.10	3.00	3.00
March	3.10	3.10	3.00	3.00
April	3.10	3.10	3.00	3.00
May	3.10	3.10	3.00	3.00
June	3.10	3.10	3.00	3.00
July	3.10	3.10	3.00	3.00
August	3.10	3.10	3.00	3.00
September	3.10	3.10	3.00	3.00
October	3.10	3.10	3.00	3.00
November	3.10	3.00	3.00	3.00
December	3.00	3.00	3.00	3.00
Year	3.10	3.00	3.00	3.00

Soda, Chlorate

October 18, 1871, the price was 40c. per pound; 1881, 15½c.; 1891, 10½c.; 1901, 7¾c.; 1911, 8c.; 1913, 8¼c.; 1916, February, 35c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06¼	$0.05¾	$0.06¼	$0.06¼
February	.05¾	.05¾	.06¼	.06¼
March	.06¼	.05¾	.06½	.06¼
April	.06¼	.06¼	.06½	.06½
May	.06¼	.06¼	.06½	.06½
June	.06¼	.06¼	.06½	.06½
July	.06¼	.06¼	.06½	.06½
August	.06¼	.06¼	.06½	.06½
September	.06¼	.06¼	.06½	.06½
October	.06¼	.06¼	.06½	.06½
November	.06¼	.06¼	.06½	.06½
December	.06¼	.06¼	.06½	.06½
Year	.06¼	.05¾	.06½	.06¼

Soda, Cyanide

October 18, 1913, the price was 25c.; 1917, January, $2.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.18	$0.18	$0.18	$0.18
February	.18	.18	.18	.18
March	.18	.18	.18	.18
April	.18	.18	.18	.18
May	.18	.18	.18	.18
June	.18	.18	.18	.18
July	.18	.18	.18	.18
August	.18	.18	.18	.18
September	.18	.18	.18	.18
October	.18	.18	.18	.18
November	.18	.18	.18	.18
December	.18	.18	.19	.19
Year	.18	.18	.19	.18

Soda, Nitrite, 96 to 98 Percent

Not quoted prior to August, 1917, when price was 44c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.09	$0.08½	$0.08½
February	.09	.08¾	.08½	.08
March	.09	.08¾	.08	.079
April	.08¾	.08¾	.079	.079
May	.08¾	.08¾	.0815	.0815
June	.08¾	.08¾	.0815	.0815
July	.08¾	.08¾	.0815	.0815
August	.08¾	.08¾	.0815	.0815
September	.08¾	.08¾	.0815	.0815
October	.08¾	.08½	.0815	.0815
November	.08½	.08½	.0815	.07½
December	.08½	.08½	.07½	.07½
Year	.09	.08½	.08½	.07½

Soda, Hyposulphite, Ordinary

October 18, 1871, the price was $9 per 100 pounds; 1881, $4.50; 1891, $2; 1901, $1.80; 1911, $1.30; 1913, $1.30; 1918, November, $4.10.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.40	$2.40	$2.40	$2.40
February	2.40	2.40	2.40	2.40
March	2.40	2.40	2.40	2.40
April	2.40	2.40	2.40	2.40
May	2.40	2.40	2.40	2.40
June	2.40	2.40	2.40	2.40
July	2.40	2.40	2.40	2.40
August	2.40	2.40	2.40	2.40
September	2.40	2.40	2.40	2.40
October	2.40	2.40	2.40	2.40
November	2.40	2.40	2.40	2.40
December	2.40	2.40	2.40	2.40
Year	2.40	2.40	2.40	2.40

Soda, Phosphate, Commercial

October 18, 1871, the price was 30c. per pound; 1881, 20c.; 1891, 22c.; 1901, 2½c.; 1911, 2¼c.; 1913, 2¼c.; 1918, January, 7c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03¼	$0.03¼	$0.03¼	$0.03¼
February	.03¼	.03¼	.03¼	.03¼
March	.03¼	.03¼	.03¼	.03¼
April	.03¼	.03¼	.03¼	.03¼
May	.03¼	.03¼	.03¼	.03¼
June	.03¼	.03¼	.03¼	.03¼
July	.03¼	.03¼	.03¼	.03¼
August	.03¼	.03¼	.03¼	.03¼
September	.03¼	.03¼	.03¼	.03¼
October	.03¼	.03¼	.03¼	.03¼
November	.03¼	.03¼	.03¼	.03¼
December	.03¼	.03¼	.03¼	.03¼
Year	.03¼	.03¼	.03¼	.03¼

Soda, Sal

October 18, 1871, the price was $1 per 100 pounds; 1881, $1.10; 1891, $1.05; 1901, 60c.; 1911, 65c.; 1913, 60c.; 1918, November, $2.50.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.10	$1.10	$0.90	$0.90
February	1.10	1.10	.90	.90
March	1.10	1.10	.90	.90
April	1.10	1.10	.90	.90
May	1.10	1.10	.90	.90
June	1.10	1.10	.90	.90
July	1.10	.90	.90	.90
August	.90	.90	.90	.90
September	.90	.90	.90	.90
October	.90	.90	.90	.90
November	.90	.90	.90	.90
December	.90	.90	.90	.90
Year	1.10	.90	.90	.90

Soda, Silicate, 60 Degrees

January 14, 1901, the price was $2 per 100 pounds; October 18, 1911, $2; 1913, $2; 1918, October, $8.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.65	$1.65	$1.60	$1.60
February	1.65	1.65	1.60	1.60
March	1.65	1.65	1.60	1.60
April	1.65	1.65	1.60	1.60
May	1.65	1.65	1.60	1.60
June	1.65	1.65	1.60	1.60
July	1.60	1.60	1.60	1.60
August	1.60	1.60	1.60	1.60
September	1.60	1.60	1.60	1.60
October	1.60	1.60	1.65	1.65
November	1.60	1.60	1.65	1.65
December	1.60	1.60	1.65	1.65
Year	1.65	1.60	1.65	1.60

Soda, Silicate, 40 Degrees

January 14, 1901, the price was $1 per 100 pounds; October 18, 1911, 65c.; 1913, 60c.; 1918, October, $3.50.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.70	$0.70	$0.65	$0.65
February	.70	.70	.65	.65
March	.70	.70	.65	.65
April	.70	.70	.65	.65
May	.70	.70	.65	.60
June	.70	.65	.60	.60
July	.65	.65	.60	.60
August	.65	.65	.60	.60
September	.65	.65	.60	.60
October	.65	.65	.65	.65
November	.65	.65	.65	.65
December	.65	.65	.65	.65
Year	.70	.65	.65	.60

Soda, Sulphide, 60 Percent

September 21, 1911, the price was $2.50 per 100 pounds; 1913, $2.50; 1918, November, $12.

	Per hundredweight			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.75	$3.75	$3.75	$3.75
February	3.75	3.75	3.75	3.75
March	3.75	3.75	3.75	3.75
April	3.75	3.75	3.75	3.75
May	3.75	3.75	3.75	3.75
June	3.75	3.75	3.75	3.75
July	3.75	3.75	3.75	3.75
August	3.75	3.75	3.75	3.75
September	3.75	3.75	3.75	3.75
October	3.75	3.75	3.75	3.75
November	3.75	3.75	3.75	3.75
December	3.75	3.75	3.75	3.75
Year	3.75	3.75	3.75	3.75

Soda, Sulphide, 30 Percent

September 21, 1911, the price was $1.50 per 100 pounds; 1913, $1.50; 1918, October, $7.

	Per hundredweight			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.75	$2.75	$2.25	$2.25
February	2.75	2.75	2.25	2.25
March	2.75	2.75	2.25	2.25
April	2.75	2.75	2.25	2.25
May	2.75	2.25	2.25	2.25
June	2.25	2.25	2.25	2.25
July	2.25	2.25	2.25	2.25
August	2.25	2.25	2.25	2.25
September	2.25	2.25	2.25	2.25
October	2.25	2.25	2.35	2.25
November	2.25	2.25	2.35	2.35
December	2.25	2.25	2.35	2.35
Year	2.75	2.25	2.35	2.25

Soda, Sulphite, Crystals

October 18, 1871, the price was 29c. per pound; 1881, 20c.; 1901, 5¼c.; 1911, 2¾c.; 1913, 2¼c.; 1916, January, 6c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03½	$0.03½	$0.02¾	$0.02¾
February	.03½	.03½	.02¾	.02¾
March	.03½	.03½	.02¾	.02¾
April	.03½	.03½	.02¾	.02¾
May	.03½	.03½	.02¾	.02¾
June	.03½	.03½	.02¾	.02¾
July	.03½	.03½	.02¾	.02¾
August	.03½	.02¾	.02¾	.02¾
September	.02¾	.02¾	.02¾	.02¾
October	.02¾	.02¾	.03	.02¾
November	.02¾	.02¾	.03	.03
December	.02¾	.02¾	.03	.03
Year	.03½	.02¾	.03	.02¾

Sulphur, Flour, Commercial

October 18, 1871, the price was $3.25 per 100 pounds; 1881, $2.80; 1891, $3.10; 1901, $1.70; 1911, $2; 1913, $2; 1918, January, $3.75.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.70	$1.70	$1.45	$1.45
February	1.70	1.70	1.45	1.45
March	1.70	1.70	1.45	1.45
April	1.70	1.70	1.45	1.45
May	1.70	1.70	1.45	1.45
June	1.45	1.45	1.45	1.45
July	1.45	1.45	1.45	1.45
August	1.45	1.45	1.45	1.45
September	1.45	1.45	1.45	1.45
October	1.45	1.45	1.45	1.45
November	1.45	1.45	1.45	1.45
December	1.45	1.45	1.55	1.45
Year	1.70	1.45	1.55	1.45

Tin, Bichloride

In 1871 the price was 45c. per pound; October 18, 1881, 36½c.; 1891, 24⅝c.; 1901, 11⅞c.; 1911, 11½c.; 1913, 12½c.; 1918, April, 29c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.17¾	$0.17¾	$0.19¼	$0.19¼
February	.17	.17	.20	.19¼
March	.17¾	.17¾	.20¼	.19¾
April	.17½	.17½	.19¾	.19½
May	.17½	.17½	.19½	.19½
June	.17¼	.17¼	.19½	.19
July	.17	.17	.19	.19
August	.17¾	.17¾	.19	.18½
September	.20	.19	.19	.19
October	.20	.19¾	.17¾	.17¾
November	.20¼	.19	.17½	.17¼
December	.20½	.19¾	.17¾	.17¾
Year	.20½	.17	.20¼	.17¼

Tin Oxide

January 28, 1901, the price was 47c. per pound; October 18, 1911, 43c.; 1913, 44c.; 1918, May, $1.10.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.66	$0.66	$0.72	$0.70
February	.66	.64	.70	.68
March	.66	.66	.70	.70
April	.66	.66	.70	.70
May	.66	.66	.70	.69
June	.64	.64	.69	.68
July	.64	.64	.68	.68
August	.66	.64	.68	.67
September	.70	.67	.67	.67
October	.70	.70	.64	.64
November	.70	.70	.62	.62
December	.72	.70	.62	.62
Year	.72	.64	.72	.62

Zinc Carbonate

October 18, 1871, the price was 29c. per pound; 1881, 24c.; 1891, 27c.; 1901, 19c.; 1911, 7¼c.; 1913, 9c.; 1918, January, 20c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13	$0.13	$0.10½	$0.10
February	.13	.13	.10	.10
March	.13	.13	.10	.10
April	.13	.13	.10	.10
May	.13	.13	.10	.10
June	.12	.12	.10	.10
July	.12	.12	.10	.10
August	.12	.11	.10	.10
September	.12	.11	.10	.10
October	.11	.10	.10	.10
November	.10	.10	.10	.10
December	.10½	.10	.10	.10
Year	.13	.10	.10½	.10

Zinc Chloride, Fused

October 18, 1871, the price was 10c. per pound; 1881, 10¼c.; 1891, 6¾c.; 1901, 6½c.; 1911, 4¼c.; 1913, 4½c.; 1917, May, 17.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06	$0.06	$0.05¼	$0.05¼
February	.06	.06	.05¼	.05¼
March	.05⅞	.05⅞	.05¼	.05¼
April	.05⅞	.05⅞	.05¼	.05¼
May	.05⅞	.05⅞	.05¼	.05¼
June	.05⅞	.05⅞	.05¼	.05¼
July	.05⅞	.05⅞	.05¼	.05¼
August	.05⅞	.05⅞	.05¼	.05¼
September	.05⅞	.05⅞	.05¼	.05¼
October	.05⅞	.05⅞	.05¼	.05¼
November	.05⅞	.05¼	.05¼	.05¼
December	.06	.05¼	.05¼	.05¼
Year	.06	.05¼	.05¼	.05¼

Buyers Prefer

"O-P-D"

Market Information because it is Definite and Accurate

Acids: Record of Prices

Acetic, 28 Percent

October 18, 1871, the price was $1 per 100 pounds; 1881, $3.50; 1891, $1.50; 1901, $1.62; 1911, $1.60; 1918, $1.75; 1918, June, $12.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.25	$3.12	$3.37½	$3.37½
February	3.25	3.25	3.37½	3.37½
March	3.25	3.25	3.37½	3.37½
April	3.25	3.25	3.37½	3.37½
May	3.25	3.25	3.37½	3.37½
June	3.25	3.25	3.37½	3.37½
July	3.25	3.25	3.37½	3.37½
August	3.25	3.25	3.37½	3.37½
September	3.25	3.25	3.37½	3.37½
October	3.25	3.25	3.37½	3.37½
November	3.37½	3.25	3.37½	3.37½
December	3.37½	3.37½	3.37½	3.37½
Year	3.37½	3.12	3.37½	3.37½

Acetic, Glacial, 99 Percent

October 18, 1871, the price was $1.15 per 100 pounds; 1881, $8; 1891, $5.50; 1901, $4; 1911, $8.50; 1913, $8; 1918, May, $42.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$11.46	$11.01	$11.90	$11.90
February	11.46	11.46	11.90	11.90
March	11.46	11.46	11.90	11.90
April	11.46	11.46	11.90	11.90
May	11.46	11.46	11.90	11.90
June	11.46	11.46	11.90	11.90
July	11.46	11.46	11.90	11.90
August	11.46	11.46	11.90	11.90
September	11.46	11.46	11.90	11.90
October	11.46	11.46	11.90	11.90
November	11.90	11.46	11.90	11.90
December	11.90	11.90	11.90	11.90
Year	11.90	11.01	11.90	11.90

Battery

October 18, 1871, the price was $2.25 per 100 pounds; 1881, $1.22; 1891, 85c.; 1901, $1.20; 1911, $1; 1913, $1; 1918, September, $9.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.25	$1.25	$1.25	$1.25
February	1.25	1.25	1.25	1.25
March	1.25	1.25	1.25	1.25
April	1.25	1.25	1.25	1.25
May	1.25	1.25	1.25	1.25
June	1.25	1.25	1.25	1.25
July	1.25	1.25	1.25	1.25
August	1.25	1.25	1.25	1.25
September	1.25	1.25	1.25	1.25
October	1.25	1.25	1.35	1.25
November	1.25	1.25	1.35	1.35
December	1.25	1.25	1.60	1.35
Year	1.25	1.25	1.60	1.25

Boric, Crystals

October 18, 1871, the price was 75c. per pound; 1881, 15c.; 1891, 13½c.; 1901, 10¾c.; 1911, 7c.; 1913, 7c.; 1919, December, 14½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08½	$0.08½	$0.08	$0.08
February	.08½	.08½	.08	.08
March	.08½	.08½	.08	.08
April	.08½	.08½	.08	.08
May	.08½	.08½	.08	.08
June	.08½	.08½	.08	.08
July	.08½	.08½	.08	.08
August	.08½	.08½	.08	.08
September	.08½	.08½	.08	.08
October	.08½	.08	.08	.08
November	.08	.08	.08	.08
December	.08	.08	.08	.08
Year	.08½	.08	.08	.08

Citric, Crystals

October 18, 1871, the price was 80c. per pound; 1881, 63c.; 1891, 42c.; 1901, 36c.; 1911, 38½c.; 1913, 55c.; 1918, December, $1.25

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.45½	$0.45	$0.44¼	$0.43½
February	.45	.45	.43½	.43½
March	.45	.45	.43½	.43½
April	.45	.44¾	.43½	.43½
May	.44¾	.44¾	.44½	.43½
June	.44½	.44¾	.45½	.44½
July	.44¾	.44¾	.45½	.45½
August	.44¾	.44¾	.45½	.45½
September	.44¾	.44¾	.45½	.45½
October	.44¾	.44¾	.44½	.44½
November	.44¾	.44¾	.44½	.44½
December	.44¾	.44¾	.44½	.44½
Year	.45½	.44¾	.45½	.43½

Formic

In 1911 the price was 11c.; October 18, 1913, 14c. to 14½c.; 1918, January, 36c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10½	$0.10¼	$0.10½	$0.10½
February	.11	.10½	.10½	.10½
March	.11½	.11	.10½	.10½
April	.11	.11	.10½	.10½
May	.11	.10½	.10½	.10½
June	.10½	.10½	.10½	.10½
July	.10½	.10½	.10½	.10½
August	.10½	.10½	.11	.10½
September	.10½	.10½	.11	.11
October	.10½	.10½	.11	.11
November	.10½	.10½	.11	.11
December	.10½	.10½	11.	.11
Year	.11½	.10¼	.11	.10½

Muriatic, 22 Degrees

October 18, 1871, the price was $3 per 100 pounds; 1881, $1.80; 1891, $1.20; 1901, $1.50; 1911, $1.45; 1913, $1.45; 1916, June $5.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.75	$1.75	$1.75	$1.75
February	1.75	1.75	1.75	1.75
March	1.75	1.75	1.75	1.75
April	1.75	1.75	1.75	1.50
May	1.75	1.75	1.50	1.50
June	1.75	1.75	1.50	1.50
July	1.75	1.75	1.50	1.50
August	1.75	1.75	1.50	1.50
September	1.75	1.75	1.50	1.50
October	1.75	1.75	1.95	1.50
November	1.75	1.75	1.95	1.95
December	1.75	1.75	1.95	1.95
Year	1.75	1.75	1.95	1.50

Nitric, 42 Degrees

October 18, 1871, the price was $13 per 100 pounds; 1881, $8.25; 1891, $4.25; 1901, $4.50; 1911, $4.50; 1913, $4.50; 1917, October, $10.70.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$6.25	$6.25	$6.50	$6.50
February	6.25	6.25	6.50	6.50
March	6.25	6.25	6.50	6.50
April	6.25	6.25	6.50	6.50
May	6.50	6.25	6.50	6.50
June	6.50	6.50	6.50	6.50
July	6.50	6.50	6.50	6.50
August	6.50	6.50	6.50	6.50
September	6.50	6.50	6.50	6.50
October	6.50	6.50	6.50	6.50
November	6.50	6.50	6.50	6.50
December	6.50	6.50	6.50	6.50
Year	6.50	6.25	6.50	6.50

Oleum, 20 Percent

October 18, 1871, the price was $25 per ton; 1881, $15; 1891, $22; 1901, $36; 1911, $22; 1913, $25; 1918, November, $29.50.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$17.50	$17.50	$17.50	$17.50
February	17.50	17.50	17.50	17.50
March	17.50	17.50	17.50	17.50
April	17.50	17.50	17.50	17.50
May	17.50	17.50	17.50	17.50
June	17.50	17.50	17.50	17.50
July	17.50	17.50	17.50	17.50
August	17.50	17.50	17.50	17.50
September	17.50	17.50	17.50	17.50
October	17.50	17.50	17.50	17.50
November	17.50	17.50	18.00	18.00
December	17.50	17.50	18.00	18.00
Year	17.50	17.50	18.00	17.50

Oxalic

October 18, 1871, the price was 25c. per pound; 1881, 9¾c.; 1891, 6¾c.; 1901, 5c.; 1911, 7½c.; 1913, 7½c.; 1916, March, 80c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10¾	$0.10¾	$0.11¼	$0.10¾
February	.10¾	.10¾	.11¼	.11¼
March	.10¾	.10¾	.11	.11
April	.10¾	.10¾	.11	.11
May	.10¾	.10¾	.11	.11
June	.10¾	.10¾	.11	.11
July	.10¾	.10¾	.11	.11
August	.10¾	.10¾	.11	.11
September	.10¾	.10¾	.11	.11
October	.10¾	.10¾	.11	.11
November	.11	.11	.11	.11
December	.11	.10¾	.11	.11
Year	.11	.10¾	.11¼	.10¾

Phosphoric, 50 Percent, Technical

(In carboys)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07	$0.07	$0.08¼	$0.08¼
February	.07	.07	.08¼	.08¼
March	.07	.07	.08¼	.08¼
April	.07	.07	.08¼	.08¼
May	.07	.07	.08¼	.08¼
June	.07	.07	.08¼	.08¼
July	.07	.07	.08¼	.08¼
August	.07	.07	.08¼	.08¼
September	.07	.07	.08¼	.08¼
October	.08¼	.07	.08¼	.08¼
November	.08¼	.08¼	.08¼	.08¼
December	.08¼	.08¼	.08¼	.08¼
Year	.08¼	.07	.08¼	.08¼

Sulphuric, 60 Degrees

(In tanks)

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$10.00	$10.00	$10.50	$10.50
February	10.00	10.00	10.50	10.50
March	10.00	10.00	10.50	10.50
April	10.00	10.00	10.50	10.50
May	10.00	10.00	10.50	10.50
June	10.00	10.00	10.50	10.50
July	10.50	10.00	10.50	10.50
August	10.50	10.50	10.50	10.50
September	10.50	10.50	10.50	10.50
October	10.50	10.50	11.00	10.50
November	10.50	10.50	11.00	11.00
December	10.50	10.50	11.00	11.00
Year	10.50	10.00	11.00	10.50

Tartaric, Crystals

October 18, 1871, the price was 50c. per pound; 1881, 42c.; 1891, 33c.; 1901, 28c.; 1911, 30¼c.; 1913, 31¼c.; 1919, April, 83c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.29	$0.27¾	$0.27¾	$0.27½
February	.28	.27¾	.31½	.27¾
March	.28	.28	.32	.31½
April	.28	.28	.34	.33
May	.28¼	.28	.35	.34
June	.28¾	.28½	.37	.35
July	.29	.28¾	.37	.37
August	.29	.29	.37	.37
September	.29	.29	.37	.36
October	.29	.27½	.37	.36
November	.27½	.27½	.36	.36
December	.27½	.27½	.36	.36
Year	.29	.27½	.37	.27½

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Coaltar Products: Market Review

Influences bearing on the market for coaltar products at the beginning of 1927 were of a healthy and stabilizing nature. There had been no over-production during the immediately preceding months, and the various manufacturers entered the new year with moderate stocks of the major items on hand. The ratio of consumption had been determined during the previous year with fair accuracy, and the policy during the early part of 1927 was to restrict production to those limits which were essential and to avoid the accumulation of unnecessary stocks, which would inevitably, through the creation of competition, weaken the position.

For several years the textile industry had been slowly but surely establishing itself on a sounder basis than at any time since the war. A great measure of success had been achieved in 1926. Finishers and dyers were able to estimate requirements with certain definiteness, and this ability enabled them to buy colors more confidently and for more remote use than in the past. Manufacturers of colors were thus in a position to negotiate for forward supplies of necessary materials, principally intermediates.

The expansion of the lacquer industry had been enormous during 1926. Producers of coaltar crudes, which are used as solvents in lacquer manufacture, had little apprehension as to the market for their products. Thus, consequently, at the beginning of the year, the market for coaltar products was more satisfactorily and more firmly supported than in a number of years.

The leading producers of crudes had been able to sell a large part of their prospective production on contract, so that for months to come an outlet was assured for their production. This was an excellent stabilizer for prices, inasmuch as it eliminated a lot of competition, and with such a good outlet already secured, sellers were less disposed to make concessions in order to interest reluctant buyers. Toluene, solvent naphtha, and xylene were among the crudes most largely bought on contract. The production of benzol was very large; much of it was under contract, but there was still a surplus of production for which no market had been secured. On the other hand, the domestic production of toluene was hardly adequate to current consumptive requirements, largely due to the enormous demands of the lacquer industry. Although production of this crude was pushed to the utmost during the early part of the year all of it was required for contract shipments and there was practically nothing of consequence to be had prompt shipment from any of the distributors. Naturally prices were firmly maintained.

During the early months of the year the consumption of solvent naphtha and xylene did not come quite up to that of toluene, and these crudes were rather easier in tone. Nevertheless there were no changes in the prices and instances of shading were not frequent, although a deal of competition arose during February and early March.

Benzol was another story. While consumption of the material during the first quarter of the year was larger than ever, so was production. And the two did not quite balance. Liberal stocks were accumulated in some quarters. Fortunately a foreign demand developed, and these stocks were partially eliminated in this way. Selling pressure, however, became marked during February and while leading distributors fought against reductions in prices, there were outside sellers who did not refrain from selling at low prices when the opportunity offered for a substantial sale. Finally, by the beginning of March the shading had become so general that quoted prices no longer had any real significance. This brought about reductions of 1c. per gallon in the different grades in the first week of March.

Sales continued to be made for a short time after the reduction at figures below the quoted levels, but the increase in demand which followed the lowering of the prices provided a broader outlet for the surplus and it was shortly cleaned up. Production in the meantime had also suffered some check, through seasonal inactivity in some trades in which benzol is secured as a by-product. The result was that as March wore on a deal more firmness developed in a situation which had been lamentably weak, and by the end of the month firmness had become so marked that advances in prices were made early in April. The former schedule was resumed.

Pyridin's Extinction

A ruling by the United States Department of the Treasury made in the Fall of 1926 prohibited the use of pyridin as a denaturant after April 1, 1927. When the ruling was announced prices on pyridin slumped abruptly and after the first of the year trading was practically suspended, as manufacturers of denatured alcohol appeared to have stocks on hand and all haste was made to use these up. Importation practically stopped after the beginning of the year and dealers and importers sought earnestly for some market for the goods they had on hand. None was to be found, however, as the use of this material in the dye industry is too small to receive much consideration. April 1 prices were cut in half, as the biggest use for it came to an end as far as this country is concerned. The meager demand from the dye trade could easily be handled from what was left on spot, the sales amounting to practicallly nothing for the first few months of the year.

Basic Products Fluctuate

The volume of buying in benzol throughout the early Spring months of the year appeared to be in sufficiently large volume to hold values for the 90 percent as well as the pure grades at a basis of 23c. per gallon. Contract shipments appeared to be going through in substantial volume and with the opening of the outdoor season early in April the requisitions on stocks for the use of motorists were being conducted along broad lines. The British coal strike of the year before had tended to strength market conditions through foreign benzol buying. Production here had not suffered any, but there was always the fear that foreign requisitions would develop along still broader lines, thus making it difficult for domestic producers to take care of both the domestic and the foreign outlets.

While business in benzol continued to reach large totals during the summer months, its production was also running at a relatively high rate, necessitated by the wide calls which were being experienced for a number of related products. Early in July this situation was reversed again by a curtailment of operations at quite a number of leading coke plants, and this had an influence on the benzol position. These conditions did not continue for any appreciable period, however, for production appeared to be backing and filling. While the volume of contract shipments held up satisfactorily during the late summer months, the fact was that demand for some of the other distillates had so increased the production of benzol that along in the early Fall months the situation began to be quite unsettled. In fact, in the closing days of October business was being booked at material discounts in benzol with independent ovens in the Middle West reported to be accepting concessions of as much as 2c. to 3c. per gallon.

As was the case earlier in the year this condition was only of relatively brief duration, and early in November the market started to strengthen again along with reports that production had dropped to something less than 50 percent of normal along with a drastic curtailment in pig iron production resulting in the lowest prices seen for the latter staple in a period of eleven years. With the production outlook strengthened all round, conditions in benzol began to improve in the closing days of the year. Contracting for requirements for the 1928 season had been in full progress during November and December, and at the close of the year leading producers stated they had fully as large a gallonage under contract as they had had in the year before.

The other coaltar basic products closely allied to benzol reflected the improved conditions common to the latter in the closing days of the year. Producers said they had been successful in booking contracts for amounts which compared quite favorably with those booked earlier in the year. There was every indication of stabilized conditions in 1928, at the end of 1927. The call for products, like toluol, which found so wide an application in the lacquer industry, was a high light of the market. The year ended with production of benzol, solvent naphtha and toluol at not much better than 40 to 60 percent of normal. An improvement was looked for in the rate of blast furnace operations, but doubts were expressed that this would show itself to any appreciable extent until the spring of 1928.

Some Tariff Cuts

Domestic producers had the market for phenol well in hand throughout the year. The midsummer inertia which had depressed values to a basis of around 16c. per pound came to an end in August when leading producers announced an advance of 2c. per pound to 18c. to 20c. per pound as to quantity. There was a subsequent reaction of 1c. per pound. Under the flexible provisions of the tariff act of 1922 President Coolidge November 1 ordered a 50 percent reduction in the import duty on phenol. The duty was cut from 40 percent ad valorem and 7c. per pound to 20 percent ad valorem and 3½c. per pound. This action failed to exert any influence on the price situation, manufacturers still quoting from 17c. to 20c. per pound. The duty was still prohibitive insofar as foreign competition was concerned, for it was the equivalent of about 6.9c. per pound, which, added to the foreign selling valuation, brought the import cost close to 24c. per pound.

Earlier in the summer similar action had been taken with reference to cresylic acid when a 50 percent reduction in the tariff was ordered by presidential proclamation. Commercial grades of cresylic acid were not affected by this action as they were already being imported free of duty when within the boiling range of less than 5 percent distilling below 190° C. and less than 75 percent distilling below 215° C. However, special grades of cresylic acid of the lower boiling range that is more than 5 percent distilling below 190° and more than 75 percent distilling below 215° and including phenol and ortho, meta and para cresols and the better known cresol U.S.P. were within the dutiable range and were thus affected by the change in the tariff, but not sufficiently to be of any benefit to buyers. In the case of U.S.P. cresol, selling in the United States for 15c. per pound the duty would be charged on the basis of the American selling price of 15c. per pound at 3½c. per pound specific plus 20 percent ad valorem, which equals a duty of 6½c. per pound or at 8½ pounds to the gallon, 55c. per gallon which still left the duty on a prohibitive basis.

Stability in Naphthalene

Refiners of naphthalene were successful in maintaining their asked prices of 4½c. per pound over the first three quarters of the year, but they had their hands full taking care of regular contract business over that period. Not until the middle of July did the regular contract movement begin to show any appreciable diminution. The season proved to be a generally satisfactory one throughout, no accumulations worthy of special mention coming under notice at any time.

A great deal of buying was done by jobbers throughout the fall months. Prices strengthened in the last few weeks of 1927 until they reached a level of 5c. per pound for the balls and the flake. This strengthening was largely attributed to scarcity of the crude, which reached a basis of $2.35 per 100 pounds with slight chance of any reaction since enormous quantities were required for construction work in Europe. In the closing days of the year domestic producers announced they would accept contracts for 1928 deliveries on the basis of 5c. per pound in barrels for the flake and at 6c. per pound for the balls. Some contracting was done at this basis, but the bulk of the business was not expected to put in an appearance until around the Spring of 1928.

Intermediates Weaken

After maintaining a high degree of stability for the greater part of the year a considerable number of coaltar acids and intermediates started to show the effects of persistent hand-to-mouth buying, and concessions were named in a formidable list of products. These included laurent's acid, sulphanilic acid, alphanaphthylamine. G salt, metaphenylenediamine, dianisidin, diaphenylamine, ethylbenzylanilin, metatoluylenediamine, mixed toluidin, orthonitrochlorobenzene, paratoluidin, R salt, xylidin, paraaminophenol base, thiocarbanilide, dimethylanilin, nitrobenzene and Neville & Winther's acid. Most of the revisions downward were designed to stimulate a more active contract movement for 1928.

Decidedly strong conditions ruled in most of the heavier basic products in the last quarter of the year. The strength of creosote oil, tar acid oil and some of the other high gravity oils was quite pronounced. Only limited shipments were putting in an appearance from the British markets as foreign manufacturers had very little to offer.

In addition to buying being seen in the intermediate list from color makers other industrial users such as the paint, varnish, enameling, lacquer, and linoleum industries were all taking good sized quantities of basic products. This occasioned revived strength in a number of products. The shortage of cresols previously referred to made itself more conspicuous in the closing days of the year. One inquiry was uncovered from European sources for upward of 1,000,000 gallons of creosote oil for shipment over the year. This attested the scarcity of this product in the European markets where it was being extensively utilized for wood preserving. The tremendous demands being uncovered for coaltar products all over Europe attracted more than the usual degree of interest because domestic producers felt they would be assured of a good outlet for quite a number of their products. It was recalled that European holders had unloaded the bulk of their holdings of coaltar products co-incidently with the resumption of coal mining in the British Isles. This proved to be a boomerang for its was not long thereafter that a scarcity was reported to be prevailing in the British markets on a great many of the most important items including cresol, cresylic acid, creosote oil and naphthalene. Virtually all of Europe including Russia appeared to be in need of road renovating; hence tremendous inquiries for these products were being uncovered.

In the general run of intermediates and coaltar acids, while a great many items had tended in buyers' favor at the end of the year, others gave evidence of increasing firmness. Among the upward revisions were 3c. per pound for Schaeffer's salts, 1c. a gallon for grade 1 creosote oil, 3c. per pound for orthonitrotoluene, 3c. for orthotoluidin, 1c. for paranitratoluene, 2c. for naphthionate acid, 4c. for Neville & Winther's acid, and ½c. per pound for anilin oil. Scarcity of supplies seemed to be quite marked in the case of orthonitrotoluene, and orthotoluidin. Stocks of paranitratoluene were also difficult to secure.

Competition in Color Markets

Revisions announced in the general price schedules were significant in view of the progress toward stabilization which had been affected in the European markets. Foreign producers it was known were preparing for a big development increase for 1928 and the price revisions which had been announced here were made largely for the purpose, it was understood, of meeting such foreign competition as was likely to show itself. Price lists of domestic producers were generally quite flexible, therefore, and permitted good business to be closed under competitive conditions.

It was a moot question as to how much of the reactionary price tendency which had been seen in so many of the leading intermediates would be reflected in the market for finished dyes. So far as the actual color market was concerned conditions could hardly be described as entirely satisfactory, for while the consumption of the commoner grades continued on as large a scale as ever, the demand for the better qualities of color because of the prevailing tendency toward light colors fell off. There was a tendency toward improvement in chrome greens and yellows early in the year, while acid alkali blues and basic methylene blues showed weakness. Consuming demands for colors on the whole had shifted to small lot buying toward the end of the year. The buying movement was of good dimensions as a whole during the last quarter of the year, although consumers generally appeared to be averse to commiting themselves beyond the requirements of the moment. It was noticeable that contracting arranged during the last few weeks of the year was generally for limited periods going in most instances not beyond the month of June, 1928. The reluctance of buyers to place orders beyond this period was attributed in not a few directions to the stiffening tendency of prices for the finished product in the face of the many downward revisions which had been seen in the general run of intermediates. The difficulties besetting so large a proportion of the New England mills was another factor making for hesitancy in the matter of placing contracts. Most of the mills in New England were working on drastically curtailed schedules and there seemed scant probability they would be able to overcome their difficulties inside of a period of months.

The evolution of new colors by the chemists of the big color companies was constantly referred to throughout the year. Thus American prototypes for practically every important European dye product were available in this market at the close of the year. As the result of the continued success of its research laboratories one of the prominent color companies announced at the close of the year that it was producing three of the fastest colors known to dyeing including carbanthrene blue G.C.D. double paste, carbanthrene G. double paste and carbanthrene black B. double paste. These were all readily reduced and dissolved with caustic soda and hydrosulphite and were suitable for application on rayon and cotton in all types of machines.

Comparative Values

By holding production of a majority of products down to within reasonable limits leading producing interests were successful last year in maintaining a majority of their products at levels which insured a fair return for their efforts. The year closed with all of the principal crudes showing a firmer undertone. The competition such as it was came principally in the intermediate products. A glance at the subjoined tabulation giving a series of Oil, Paint and Drug Reporter weighted

index numbers for a typical group of twenty coaltar products on the basis of a normal of 100 for August 1, 1914, reveals the close adherence of manufacturers to quoted contract prices for the first three quarters of the year, but shows that sales rivalry was keener during the last quarter, when a net loss of 2.9c. per pound on the average was shown for the products in question, viz:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec.31.
128.9	128.7	128.3	128.0	126.0

Coaltar Products—Record of Prices

Basic Products

Benzene (Benzol), 90 Percent

In March, 1916, the price was 90c. per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.24	$0.24	$0.24	$0.24
February	.24	.24	.24	.23
March	.24	.24	.23	.23
April	.24	.24	.24	.24
May	.25	.24	.24	.24
June	.25	.25	.23	.23
July	.25	.25	.23	.23
August	.25	.25	.23	.23
September	.25	.25	.23	.23
October	.25	.24	.23	.23
November	.24	.24	.21	.21
December	.24	.24	.21	.21
Year	.25	.24	.24	.21

Cresol, U.S.P.

In January, 1917, the price was $1.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.18	$0.18	$0.17½	$0.17½
February	.18	.18	.17½	.17½
March	.18	.18	.17½	.17½
April	.18	.18	.17½	.17½
May	.18	.18	.17½	.17½
June	.18	.18	.17½	.17½
July	.18	.18	.17½	.17½
August	.18	.18	.17½	.17½
September	.18	.17½	.17½	.17½
October	.17½	.17½	.17½	.17½
November	.17½	.17½	.17½	.17½
December	.17½	.17½	.17½	.17½
Year	.18	.17½	.17½	.17½

Naphtha, Solvent

In January, 1917, the price was 30c. per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.35	$0.35	$0.35	$0.35
February	.35	.35	.35	.35
March	.35	.35	.35	.35
April	.35	.35	.35	.35
May	.35	.35	.35	.35
June	.35	.35	.35	.35
July	.35	.35	.35	.35
August	.35	.35	.35	.35
September	.35	.35	.35	.35
October	.35	.35	.35	.35
November	.35	.35	.35	.35
December	.35	.35	.35	.35
Year	.35	.35	.35	.35

Naphthalene, Flake

In 1901 the price was 2¾c. per pound; October 18, 1911, 2½c.; 1913, 2¼c.; 1916, March, 16c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06½	$0.05¾	$0.04½	$0.04½
February	.05¾	.05¾	.04½	.04½
March	.06	.06	.04½	.04½
April	.06	.06	.04½	.04½
May	.06	.05¾	.04½	.04½
June	.05¾	.05¾	.04½	.04½
July	.05¾	.04¾	.04½	.04½
August	.04¾	.04¾	.04½	.04½
September	.04¾	.04¾	.04½	.04½
October	.05	.05	.05	.04½
November	.05	.05	.05	.05
December	.05	.05	.05	.05
Year	.06½	.04¾	.05	.04½

Phenol, U.S.P.

July 10, 1875, the price was 55c. per pound; October 18, 1881, 40c.; 1891, 12c.; 1901, 23c.; 1911, 15c.; 1913, 8½c.; 1918, February, 18c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.22	$0.22	$0.17	$0.17
February	.22	.22	.17	.17
March	.22	.22	.17	.17
April	.22	.22	.17	.17
May	.22	.22	.17	.16
June	.22	.22	.16	.16
July	.22	.17	.16	.16
August	.17	.17	.18	.16
September	.17	.17	.17	.17
October	.17	.17	.17	.17
November	.17	.17	.17	.17
December	.17	.17	.17	.17
Year	.22	.17	.18	.16

Tar Acid Oil, 25 Percent

In July, 1918, the price was 55c. per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.29	$0.26	$0.28	$0.28
February	.29	.29	.29	.28
March	.29	.29	.29	.29
April	.29	.29	.29	.29
May	.29	.29	.29	.29
June	.29	.28	.29	.29
July	.28	.28	.29	.29
August	.28	.28	.29	.29
September	.28	.28	.29	.29
October	.28	.28	.29	.29
November	.28	.28	.29	.29
December	.28	.28	.29	.29
Year	.29	.26	.29	.28

Toluene

In February, 1918, the price was $6 per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.35	$0.35	$0.35	$0.35
February	.35	.35	.35	.35
March	.35	.35	.35	.35
April	.35	.35	.35	.35
May	.35	.35	.35	.35
June	.35	.35	.35	.35
July	.35	.35	.35	.35
August	.35	.35	.35	.35
September	.35	.35	.35	.35
October	.35	.35	.35	.35
November	.35	.35	.35	.35
December	.35	.35	.35	.35
Year	.35	.35	.35	.35

Xylene, Nitration

In February, 1917, the price was $1.20 per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.70	$0.70	$0.55	$0.55
February	.70	.70	.55	.55
March	.70	.70	.55	.55
April	.70	.70	.55	.55
May	.70	.70	.55	.55
June	.70	.70	.55	.55
July	.70	.70	.55	.55
August	.70	.70	.55	.55
September	.70	.70	.55	.55
October	.55	.55	.55	.55
November	.55	.55	.55	.55
December	.55	.55	.55	.55
Year	.70	.55	.55	.55

Acids

Benzoic, Technical

October 18, 1871, the price was 30c. per ounce; 1881, 22c.; 1891, 8c.; 1901, 12½c.; 1911, 11¼c.; 1913, 23c. per pound; 1916, December, $9.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.57	$0.57	$0.57	$0.57
February	.57	.57	.57	.57
March	.57	.57	.57	.57
April	.57	.57	.57	.57
May	.57	.57	.57	.57
June	.57	.57	.57	.57
July	.57	.57	.57	.57
August	.57	.57	.57	.57
September	.57	.57	.57	.57
October	.57	.57	.57	.57
November	.57	.57	.57	.57
December	.57	.57	.57	.57
Year	.57	.57	.57	.57

Cresylic, Pale, 97 to 99 Percent

In August, 1918, the price was $1.25 per gallon.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.65	$0.60	$0.60	$0.60
February	.65	.65	.60	.60
March	.65	.65	.60	.60
April	.65	.65	.63	.60
May	.63	.63	.65	.65
June	.62	.58	.65	.65
July	.58	.56	.65	.65
August	.55	.55	.66	.65
September	.62	.59	.66	.66
October	.60	.58	.75	.72
November	.60	.58	.72	.72
December	.60	.60	.72	.72
Year	.65	.55	.75	.60

H

In August, 1918, the price was $3.40 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.68	$0.68	$0.60	$0.60
February	.68	.63	.60	.60
March	.63	.63	.60	.60
April	.63	.63	.60	.60
May	.63	.63	.60	.60
June	.63	.63	.60	.60
July	.63	.60	.60	.60
August	.60	.60	.60	.60
September	.60	.60	.60	.60
October	.60	.60	.60	.60
November	.60	.60	.68	.60
December	.60	.60	.68	.68
Year	.68	.60	.68	.60

Picric

In August, 1881, the price was 43c. per pound; 1891, 52½c.; 1901, 40c.; 1911, 55c.; 1913, 50c.; 1916, May, $1.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.30	$0.30	$0.30	$0.30
February	.30	.30	.30	.30
March	.30	.30	.45	.30
April	.30	.30	.45	.45
May	.30	.30	.45	.45
June	.30	.30	.45	.45
July	.30	.30	.45	.45
August	.30	.30	.45	.45
September	.30	.30	.45	.45
October	.30	.30	.45	.45
November	.30	.30	.45	.45
December	.30	.30	.45	.40
Year	.30	.30	.45	.30

Salicylic, Technical

On August 1, 1881, the price was $1.40 per pound; 1891, $1.12; 1901, 39½c.; 1911, 32c.; 1913, 25c.; 1916, April, $4.25.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.33	$0.33	$0.37	$0.37
February	.33	.33	.37	.37
March	.33	.33	.37	.37
April	.33	.27	.37	.37
May	.27	.27	.37	.37
June	.27	.27	.37	.37
July	.27	.27	.37	.37
August	.27	.27	.37	.37
September	.27	.27	.37	.37
October	.37	.27	.37	.37
November	.37	.37	.37	.37
December	.37	.37	.37	.37
Year	.37	.27	.37	.37

Intermediates

Alphanaphthol, Technical

In December, 1917, the price was $1.25 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.65	$0.60	$0.60	$0.60
February	.60	.60	.60	.60
March	.60	.60	.60	.60
April	.60	.60	.60	.60
May	.60	.60	.60	.60
June	.60	.60	.60	.60
July	.60	.60	.60	.60
August	.60	.60	.60	.60
September	.60	.60	.60	.60
October	.60	.60	.60	.60
November	.60	.60	.60	.60
December	.60	.60	.60	.60
Year	.65	.60	.60	.60

Alphanaphthylamine

In January, 1917, the price was $1.35 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.35	$0.35	$0.35	$0.35
February	.35	.35	.35	.35
March	.35	.35	.35	.35
April	.35	.35	.35	.35
May	.35	.35	.35	.35
June	.35	.35	.35	.35
July	.35	.35	.35	.35
August	.35	.35	.35	.35
September	.35	.35	.35	.35
October	.35	.35	.35	.35
November	.35	.35	.35	.35
December	.35	.35	.35	.32
Year	.35	.35	.35	.32

Anilin Oil

August 16, 1881, the price was 26c. per pound; October 18, 1891, 25c.; 1901, 9c.; 1911, 10¾c.; 1913, 10¾c.; 1916, December, 95c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.16	$0.16	$0.15	$0.14¾
February	.16	.16	.14¾	.14¾
March	.16	.16	.14¾	.14¾
April	.16	.16	.14¾	.14¾
May	.16	.16	.14¾	.14¾
June	.16	.16	.14¾	.14¾
July	.16	.15	.14¾	.14¾
August	.16	.15	.14¾	.14¾
September	.16	.16	.14¾	.14¾
October	.16	.16	.14¾	.14¾
November	.16	.15	.15	.15
December	.15	.15	.15¾	.15¾
Year	.16	.15	.15¾	.14¾

Anilin Salt

August 16, 1881, the price was 36c. per pound; October 18, 1891, 21c.; 1901, 8¼c.; 1911, 9½c.; 1913, 8¾c.; 1916, December, $1.35.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.22	$0.22	$0.24	$0.24
February	.22	.22	.24	.24
March	.22	.22	.24	.24
April	.22	.22	.24	.24
May	.22	.22	.24	.24
June	.22	.22	.24	.24
July	.22	.22	.24	.24
August	.24	.22	.24	.24
September	.24	.24	.24	.24
October	.24	.24	.24	.24
November	.24	.24	.24	.24
December	.24	.24	.24	.24
Year	.24	.22	.24	.24

Betanaphthylamine, Technical

In January, 1918, the price was $2 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.63	$0.63	$0.65	$0.65
February	.63	.63	.65	.65
March	.63	.63	.65	.65
April	.63	.63	.65	.65
May	.64	.63	.65	.65
June	.63	.63	.65	.65
July	.63	.63	.65	.65
August	.65	.65	.65	.65
September	.65	.65	.65	.65
October	.65	.65	.65	.65
November	.65	.65	.65	.65
December	.65	.65	.65	.65
Year	.65	.63	.65	.65

Betanaphthol, Technical

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.22	$0.22	$0.22	$0.22
February	.22	.22	.22	.22
March	.22	.22	.22	.22
April	.22	.22	.22	.22
May	.22	.22	.22	.22
June	.22	.22	.22	.22
July	.22	.22	.22	.22
August	.22	.22	.22	.22
September	.22	.22	.22	.22
October	.22	.22	.22	.22
November	.22	.22	.22	.22
December	.22	.22	.22	.22
Year	.22	.22	.22	.22

Benzaldehyde, Technical

In April, 1918, the price was $5.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.70	$0.65	$0.65	$0.65
February	.65	.65	.65	.65
March	.65	.65	.65	.65
April	.65	.65	.65	.65
May	.65	.65	.65	.65
June	.65	.65	.65	.65
July	.65	.65	.65	.65
August	.65	.65	.65	.65
September	.65	.65	.65	.65
October	.65	.65	.65	.65
November	.65	.65	.65	.65
December	.65	.65	.65	.65
Year	.70	.65	.65	.65

Benzidin Base

In March, 1917, the price was $2.10 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.72	$0.72	$0.70	$0.70
February	.72	.72	.70	.70
March	.72	.72	.74	.72
April	.72	.72	.72	.72
May	.72	.72	.72	.72
June	.72	.72	.72	.70
July	.72	.72	.70	.70
August	.72	.69	.70	.70
September	.69	.69	.70	.70
October	.70	.69	.70	.70
November	.70	.70	.70	.70
December	.70	.70	.70	.70
Year	.72	.69	.74	.70

Benzyl Chloride, 95 to 97 Percent

In May, 1918, the price was $2.70 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.30	$0.30	$0.30	$0.30
February	.30	.30	.30	.30
March	.30	.30	.30	.30
April	.30	.30	.30	.30
May	.30	.30	.30	.30
June	.30	.30	.30	.30
July	.30	.30	.30	.30
August	.30	.30	.30	.30
September	.30	.30	.30	.30
October	.30	.30	.30	.30
November	.30	.30	.30	.30
December	.30	.30	.30	.30
Year	.30	.30	.30	.30

Diethylanilin

In May, 1918, the price was $5.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.58	$0.58	$0.58	$0.58
February	.58	.58	.58	.58
March	.58	.58	.58	.58
April	.58	.58	.58	.58
May	.58	.58	.58	.58
June	.58	.58	.58	.58
July	.58	.58	.58	.58
August	.58	.58	.58	.58
September	.58	.58	.58	.58
October	.58	.58	.55	.55
November	.58	.58	.55	.55
December	.58	.58	.55	.56
Year	.58	.58	.58	.55

Dimethylanilin

In May, 1920, the price was $1.65 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.30	$0.30	$0.32	$0.32
February	.31	.31	.32	.32
March	.30	.30	.32	.32
April	.30	.30	.32	.32
May	.30	.30	.32	.32
June	.30	.30	.32	.32
July	.30	.30	.32	.32
August	.32	.30	.32	.32
September	.32	.32	.32	.32
October	.32	.32	.32	.32
November	.32	.32	.31	.31
December	.32	.32	.31	.31
Year	.32	.30	.32	.31

Dinitrobenzene

In September, 1917, the price was 80c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15	$0.15	$0.16	$0.15
February	.16	.15	.16	.15
March	.16	.16	.16	.15
April	.16	.16	.15	.15
May	.16	.16	.15	.15
June	.16	.16	.15	.15
July	.16	.15	.15	.16
August	.15	.15	.16	.15
September	.15	.15	.15	.15
October	.15	.15	.15	.15
November	.15	.15	.15	.15
December	.15	.15	.15	.15
Year	.16	.15	.15	.15

Diphenylamine

In January, 1917, the price was $1.10 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.48	$0.48	$0.48	$0.48
February	.48	.48	.48	.48
March	.48	.48	.48	.48
April	.48	.48	.48	.48
May	.48	.48	.48	.48
June	.48	.48	.48	.48
July	.48	.48	.48	.48
August	.48	.48	.48	.48
September	.48	.48	.48	.48
October	.48	.48	.45	.45
November	.48	.48	.45	.45
December	.48	.48	.45	.42
Year	.48	.48	.48	.42

Nitrobenzene

August 16, 1881, the price was 32c .per pound; October 18, 1891, 15c.; 1901, 7¾c.; 1911, 6¾c.; 1913, 6½c.; 1917, February, 25c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09½	$0.09½	$0.09¼	$0.09¼
February	.09½	.09½	.09¼	.09¼
March	.09½	.09¼	.09¼	.09¼
April	.09½	.09½	.09¼	.09¼
May	.09¼	.09½	.09¼	.09¼
June	.09½	.09	.09¼	.09¼
July	.09	.09	.09¼	.09¼
August	.09½	.09	.09¼	.09¼
September	.09½	.09¼	.09¼	.09¼
October	.09½	.09¼	.09¼	.09½
November	.09¼	.09¼	.09	.09
December	.09¼	.09¼	.09	.09
Year	.09½	.09	.09½	.09

Metanitroparatoluidin

In September, 1918, the price was $7 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.80	$1.80	$1.75	$1.75
February	1.80	1.80	1.75	1.70
March	1.80	1.80	1.70	1.70
April	1.80	1.80	1.70	1.70
May	1.80	1.75	1.70	1.70
June	1.75	1.75	1.70	1.70
July	1.75	1.75	1.70	1.70
August	1.75	1.75	1.70	1.70
September	1.75	1.75	1.70	1.70
October	1.75	1.75	1.70	1.70
November	1.75	1.75	1.70	1.70
December	1.75	1.75	1.70	1.70
Year	1.80	1.75	1.75	1.70

Metaphenylenediamine

In June, 1917, the price was $2.05 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.85	$0.85	$0.90	$0.90
February	.85	.85	.90	.90
March	.90	.90	.90	.90
April	.90	.90	.90	.90
May	.90	.90	.90	.90
June	.90	.90	.90	.90
July	.90	.90	.90	.90
August	.90	.90	.90	.90
September	.90	.90	.90	.90
October	.90	.90	.90	.90
November	.90	.90	.90	.90
December	.90	.90	.90	.84
Year	.90	.85	.90	.84

Monoethylanilin

In September, 1918, the price was $1.85 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.05	$1.05	$1.05	$1.05
February	1.05	1.05	1.05	1.05
March	1.05	1.05	1.05	1.05
April	1.05	1.05	1.05	1.05
May	1.05	1.05	1.05	1.05
June	1.05	1.05	1.05	1.05
July	1.05	1.05	1.05	1.05
August	1.05	1.05	1.05	1.05
September	1.05	1.05	1.05	1.05
October	1.05	1.05	1.05	1.05
November	1.05	1.05	1.05	1.05
December	1.05	1.05	1.05	1.05
Year	1.05	1.05	1.05	1.05

Orthonitrophenol

In October, 1918, the price was $1.70 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.90	$0.90	$0.85	$0.85
February	.90	.90	.85	.85
March	.85	.85	.85	.85
April	.85	.85	.85	.85
May	.88	.86	.85	.85
June	.88	.87	.85	.85
July	.87	.85	.85	.85
August	.85	.85	.85	.85
September	.85	.85	.85	.85
October	.85	.85	.85	.85
November	.85	.85	.85	.85
December	.85	.85	.85	.85
Year	.90	.85	.85	.85

Orthonitrotoluene

In January, 1917, the price was 65c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15	$0.15	$0.13	$0.13
February	.16	.16	.13	.13
March	.16	.16	.13	.13
April	.16	.16	.13	.13
May	.16	.16	.13	.13
June	.16	.16	.13	.13
July	.16	.16	.13	.13
August	.16	.16	.13	.13
September	.16	.16	.13	.13
October	.16	.13	.13	.13
November	.13	.13	.13	.13
December	.13	.13	.16	.13
Year	.16	.13	.16	.13

Orthotoluidin

In March, 1918, the price was $1.25 per pound.

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.25	$0.23	$0.25	$0.25
February	.25	.25	.25	.25
March	.25	.25	.26	.25
April	.25	.25	.26	.26
May	.25	.25	.26	.25
June	.25	.25	.25	.25
July	.25	.25	.25	.25
August	.25	.25	.25	.25
September	.25	.25	.25	.25
October	.25	.25	.25	.25
November	.25	.25	.25	.25
Decmeber	.25	.25	.28	.25
Year	.25	.23	.28	.25

Paraminophenal, Base

In March, 1918, the price was $5.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.25	$1.25	$1.15	$1.15
February	1.25	1.16	1.15	1.10
March	1.16	1.16	1.10	1.10
April	1.15	1.15	1.10	1.10
May	1.15	1.15	1.10	1.10
June	1.15	1.15	1.10	1.10
July	1.15	1.15	1.10	1.10
August	1.15	1.15	1.10	1.10
September	1.15	1.15	1.10	1.10
October	1.15	1.15	1.10	1.10
November	1.15	1.15	1.05	1.05
December	1.15	1.15	1.05	1.00
Year	1.25	1.15	1.15	1.00

Paranitranilin

In October, 1918, the price was $1.90 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.53	$0.51	$0.52	$0.52
February	.51	.50	.52	.52
March	.50	.50	.52	.52
April	.50	.48	.52	.52
May	.50	.48	.52	.52
June	.48	.48	.52	.52
July	.46	.44	.52	.52
August	.44	.44	.52	.52
September	.48	.44	.52	.52
October	.50	.48	.52	.52
November	.52	.50	.52	.52
December	.52	.52	.52	.52
Year	.53	.44	.52	.52

Paranitrophenol

In June, 1918, the price was $1.40 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.55	$0.55	$0.55	$0.55
February	.55	.55	.55	.55
March	.55	.55	.55	.55
April	.55	.55	.55	.55
May	.55	.55	.55	.55
June	.55	.55	.55	.55
July	.55	.55	.55	.55
August	.55	.55	.55	.55
September	.55	.55	.55	.55
October	.55	.55	.55	.55
November	.55	.55	.55	.55
December	.55	.55	.55	.55
Year	.55	.55	.55	.55

Paratoluidin

In January, 1918, the price was $2.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.55	$0.55	$0.48	$0.45
February	.55	.50	.45	.45
March	.50	.48	.45	.45
April	.50	.48	.42	.38
May	.48	.48	.38	.38
June	.48	.48	.38	.38
July	.48	.48	.38	.38
August	.48	.48	.45	.38
September	.48	.48	.45	.45
October	.48	.48	.45	.45
November	.48	.48	.45	.45
December	.48	.48	.45	.40
Year	.55	.48	.48	.38

Phthalic Anhydride, Technical

In December, 1917, the price was $6 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.18	$0.18	$0.18	$0.18
February	.18	.18	.18	.18
March	.18	.18	.18	.18
April	.18	.18	.18	.18
May	.18	.18	.18	.18
June	.18	.18	.18	.18
July	.18	.18	.18	.18
August	.18	.18	.18	.18
September	.18	.18	.18	.18
October	.18	.18	.18	.18
November	.18	.18	.18	.18
December	.18	.18	.18	.18
Year	.18	.18	.18	.18

Resorcinol, Technical

In December, 1911, the price was 80c. per pound; 1917, December, $9.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.25	$1.25	$1.25	$1.25
February	1.25	1.25	1.25	1.25
March	1.25	1.25	1.25	1.25
April	1.25	1.25	1.25	1.25
May	1.25	1.25	1.25	1.25
June	1.25	1.25	1.25	1.25
July	1.25	1.25	1.25	1.25
August	1.25	1.25	1.25	1.25
September	1.25	1.25	1.25	1.25
October	1.25	1.25	1.25	1.25
November	1.25	1.25	1.25	1.25
December	1.25	1.25	1.25	1.25
Year	1.25	1.25	1.25	1.25

Tolidin Base

In June, 1918, the price was $3 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.95	$0.95	$0.89	$0.89
February	.95	.95	.89	.89
March	.95	.93	.89	.89
April	.93	.93	.89	.89
May	.93	.93	.89	.89
June	.93	.93	.89	.89
July	.93	.95	.89	.89
August	.93	.93	.89	.89
September	.93	.89	.89	.89
October	.89	.89	.89	.89
November	.89	.89	.89	.89
December	.89	.89	.89	.89
Year	.95	.89	.89	.89

Xylidin

In January, 1918, the price was 90c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.40	$0.40	$0.38	$0.38
February	.40	.40	.38	.38
March	.40	.38	.38	.38
April	.38	.38	.38	.38
May	.38	.38	.38	.38
June	.38	.38	.38	.38
July	.38	.38	.38	.38
August	.38	.38	.38	.38
September	.38	.38	.38	.38
October	.38	.38	.38	.38
November	.38	.38	.38	.38
December	.38	.38	.38	.37
Year	.40	.38	.38	.37

Colors

Acid Alkali Blue

In March, 1917, the price was $14 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.00	$3.00	$3.00	$3.00
February	3.00	3.00	3.00	2.75
March	3.00	3.00	2.75	2.75
April	3.00	3.00	2.75	2.75
May	3.00	3.00	2.75	2.75
June	2.75	2.75	2.75	2.75
July	2.75	2.50	2.75	2.75
August	2.75	2.75	2.75	2.75
September	2.75	2.75	2.75	2.75
October	2.90	2.75	2.75	2.75
November	3.00	3.00	2.75	2.75
December	3.00	3.00	2.75	2.75
Year	3.00	2.50	3.00	2.75

Acid Black, 10 B

In December, 1918, the price was $2 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.50	$0.50	$0.50	$0.50
February	.50	.50	.50	.50
March	.50	.50	.50	.50
April	.50	.50	.50	.50
May	.50	.50	.50	.50
June	.40	.40	.50	.50
July	.45	.40	.50	.50
August	.45	.45	.50	.50
September	.45	.45	.50	.50
October	.45	.45	.50	.50
November	.45	.45	.50	.50
December	.50	.45	.50	.50
Year	.50	.40	.50	.50

Acid Green G

In December, 1918, the price was $6.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.00	$3.00	$3.00	$2.95
February	6.00	3.00	3.00	3.00
March	3.00	3.00	3.00	3.00
April	3.00	3.00	3.00	3.00
May	3.00	3.00	3.00	3.00
June	3.00	3.00	3.00	3.00
July	3.00	3.00	3.00	3.00
August	3.00	3.00	3.00	3.00
September	3.00	3.00	3.00	3.00
October	3.00	3.00	3.00	3.00
November	3.00	3.00	3.00	3.00
December	3.00	2.95	3.00	3.00
Year	3.00	2.95	3.00	2.95

Acid Metanil Yellow

In August, 1918, the price was $2.40 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.65	$0.65	$0.65	$0.65
February	.70	.70	.70	.70
March	.70	.70	.70	.70
April	.70	.70	.70	.70
May	.70	.70	.70	.70
June	.70	.70	.70	.70
July	.70	.60	.70	.70
August	.65	.60	.70	.70
September	.65	.65	.70	.70
October	.65	.65	.70	.70
November	.65	.65	.70	.70
December	.65	.65	.70	.70
Year	.70	.60	.70	.65

Acid Orange A

In January, 1891, the price was $1.10 per pound; October 18, 1901, 85c.; 1911, 90c.; 1913, $1.20; 1917, August, $1.60.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.28	$0.28	$0.28	$0.28
February	.35	.28	.35	.28
March	.35	.35	.35	.35
April	.35	.35	.35	.35
May	.35	.35	.35	.30
June	.35	.35	.30	.30
July	.30	.30	.30	.30
August	.30	.30	.30	.30
September	.30	.30	.30	.30
October	.30	.30	.30	.30
November	.30	.28	.30	.30
December	.28	.28	.30	.30
Year	.35	.28	.35	.28

Basic Fuchsin Crystals

In January, 1891, the price was $1 per pound; October 18, 1901, $1.85; 1911, $2.40; 1913, $3; 1918, March, $11.25.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.55	$1.55	$2.25	$2.25
February	2.25	1.75	2.25	2.25
March	2.25	2.25	2.25	2.25
April	2.25	2.25	2.25	2.25
May	2.25	2.25	2.25	2.25
June	2.25	2.25	2.25	2.25
July	2.25	2.25	2.25	2.25
August	2.25	2.25	2.25	2.25
September	2.25	2.25	2.25	2.25
October	2.25	2.25	2.25	2.25
November	2.25	2.25	2.25	2.25
December	2.25	2.25	2.25	2.25
Year	2.25	1.55	2.25	2.25

Basic Malachite Crystals

In January, 1918, the price was $11.75 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.65	$1.65	$1.75	$1.75
February	1.75	1.75	1.75	1.75
March	1.75	1.75	1.75	1.75
April	1.75	1.75	1.75	1.75
May	1.75	1.75	1.75	1.75
June	1.75	1.75	1.75	1.70
July	1.75	1.75	1.70	1.70
August	1.75	1.75	1.70	1.70
September	1.75	1.75	1.70	1.70
October	1.75	1.75	1.65	1.65
November	1.75	1.75	1.65	1.65
December	1.75	1.75	1.65	1.65
Year	1.75	1.65	1.75	1.65

Basic Methyl Violet Base, Conc.

In December, 1917, the price was $8.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.85	$1.80	$1.75	$1.75
February	1.75	1.75	1.75	1.75
March	1.75	1.75	1.75	1.75
April	1.75	1.75	1.75	1.75
May	1.80	1.75	1.75	1.75
June	1.80	1.80	1.75	1.75
July	1.80	1.80	1.75	1.75
August	1.80	1.70	1.75	1.75
September	1.75	1.70	1.75	1.75
October	1.75	1.75	1.75	1.75
November	1.75	1.75	1.75	1.75
December	1.75	1.75	1.75	1.75
Year	1.85	1.70	1.75	1.75

Basic Methylene Blue, Ex-Conc.

In January, 1891, the price was $2.50 per pound; 1918, January, $4.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.35	$1.35	$1.35	$1.35
February	1.35	1.35	1.35	1.35
March	1.35	1.35	1.35	1.35
April	1.35	1.35	1.10	1.10
May	1.35	1.35	1.10	1.10
June	1.35	1.35	1.10	1.10
July	1.35	1.35	1.10	1.10
August	1.35	1.35	1.10	1.10
September	1.35	1.35	1.10	1.10
October	1.35	1.35	1.00	1.00
November	1.35	1.35	1.00	1.00
December	1.35	1.35	1.00	1.00
Year	1.35	1.35	1.35	1.00

Basic Safranin B

In January, 1918, the price was $7.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.00	$2.00	$2.25	$2.25
February	2.75	2.75	2.25	2.25
March	2.75	2.75	2.25	2.00
April	3.75	2.75	1.20	1.15
May	2.50	2.50	1.15	1.15
June	2.50	2.50	1.15	1.15
July	2.50	2.50	1.15	1.15
August	2.50	2.50	1.15	1.15
September	2.50	2.25	1.15	1.15
October	2.25	2.25	1.15	1.15
November	2.25	2.25	1.15	1.15
December	2.25	2.25	1.15	1.15
Year	2.75	2.00	2.25	1.15

Basic Victoria Blue Base

In January, 1918, the price was $15 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.50	$2.50	$2.25	$2.25
February	2.75	2.75	2.25	2.25
March	2.75	2.75	2.25	2.25
April	2.75	2.75	2.25	2.25
May	2.75	2.75	2.25	2.25
June	2.75	2.75	2.25	2.25
July	2.75	2.75	2.25	2.25
August	2.75	2.75	2.25	2.25
September	2.75	2.75	2.25	2.25
October	2.75	2.75	2.25	2.25
November	2.75	2.75	2.25	2.25
December	2.75	2.75	2.25	2.25
Year	2.75	2.50	2.25	2.25

Chrome Green

In January, 1918, the price was $3.75 per pound:—

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.25	$1.25	$1.25	$1.25
February	1.50	1.50	1.50	1.50
March	1.50	1.50	1.50	1.50
April	1.50	1.50	1.50	1.50
May	1.25	1.25	1.50	1.50
June	1.25	1.25	1.50	1.40
July	1.25	1.25	1.40	1.40
August	1.25	1.25	1.40	1.40
September	1.25	1.25	1.40	1.40
October	1.25	1.25	1.40	1.40
November	1.25	1.25	1.40	1.40
December	1.25	1.25	1.40	1.40
Year	1.50	1.25	1.50	1.25

Chrome Yellow G

In January, 1918, the price was $2 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.60	$0.60	$0.55	$0.55
February	.60	.60	.55	.55
March	.60	.60	.55	.55
April	.60	.60	.60	.55
May	.60	.60	.65	.65
June	.60	.60	.65	.65
July	.60	.60	.65	.65
August	.60	.60	.65	.65
September	.60	.60	.65	.65
October	.55	.55	.55	.55
November	.55	.55	.55	.55
December	.55	.55	.65	.55
Year	.60	.55	.65	.55

Direct Black

In November, 1917, the price was $3.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.30	$0.30	$0.30	$0.30
February	.30	.30	.30	.30
March	.30	.30	.30	.30
April	.30	.30	.30	.30
May	.30	.30	.40	.30
June	.30	.30	.40	.40
July	.30	.30	.40	.40
August	.30	.30	.40	.40
September	.30	.30	.40	.40
October	.30	.30	.40	.40
November	.30	.30	.40	.40
December	.30	.30	.40	.40
Year	.30	.30	.40	.30

Direct Green B

In January, 1918, the price was $2.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.75	$0.75	$0.75	$0.75
February	.75	.75	.75	.75
March	.75	.75	.75	.75
April	.75	.75	.75	.75
May	.75	.75	.75	.75
June	.75	.70	.75	.75
July	.70	.70	.75	.75
August	.65	.65	.75	.75
September	.65	.65	.75	.75
October	.65	.65	.75	.75
November	.65	.65	.75	.75
December	.65	.65	.75	.75
Year	.75	.65	.75	.75

Sulphur Green

In January, 1918, the price was $1.50 per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.70	$0.70	$0.75	$0.75
February	.75	.75	.75	.75
March	.75	.75	.75	.75
April	.75	.75	.75	.75
May	.75	.75	.75	.75
June	.75	.75	.75	.75
July	.75	.75	.75	.75
August	.75	.75	.75	.75
September	.75	.75	.75	.75
October	.75	.75	.75	.75
November	.75	.75	.75	.75
December	.75	.75	.75	.75
Year	.75	.70	.75	.75

Sulphur Yellow

In January, 1918, the price was 90c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.40	$0.40	$0.50	$0.50
February	.40	.40	.50	.50
March	.45	.45	.50	.50
April	.45	.45	.50	.50
May	.45	.45	.50	.50
June	.45	.45	.50	.50
July	.40	.40	.50	.50
August	.40	.40	.50	.50
September	.40	.40	.50	.50
October	.40	.40	.50	.50
November	.40	.40	.50	.50
December	.40	.40	.50	.50
Year	.45	.40	.50	.50

Vat Indigo 20 Percent Paste

In October, 1901, the price was 38c. per pound; October 18, 1911, 35c.; 1913, 42c.; 1917, $1.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.14	$0.14	$0.14	$0.14
February	.14	.14	.14	.14
March	.14	.14	.14	.14
April	.14	.14	.14	.14
May	.14	.14	.14	.14
June	.14	.14	.14	.14
July	.14	.14	.14	.14
August	.14	.14	.14	.14
September	.14	.14	.14	.14
October	.14	.14	.14	.14
November	.14	.14	.14	.14
December	.14	.14	.14	.14
Year	.14	.14	.14	.14

Coaltar Dye and Chemical Imports

Imports of coaltar dyes during 1927 amounted to 4,182,026 pounds, with an invoice value of $3,423,918, according to preliminary figures compiled by the Department of Commerce and the United States Tariff Commission. This represents a decrease of 11 percent (491,170 pounds) in quantity and 17 percent ($679,383) in value in comparison with 1926. Comparative records follow:—

Coaltar Dye Imports

	Pounds.	Value.
1927*	4,182,026	$3,423,918
1926	4,673,196	4,103,301
1925	5,209,601	4,637,240
1924	3,022,539	2,908,778
1923	3,098,193	3,151,363
1922	3,982,631	5,243,257
1921	4,252,911	5,156,779
1920	3,402,582	5,763,437
1914	45,950,895	9,502,714

* Preliminary figures.

Coaltar Chemical and Lake Imports

	Pounds	
	1927.	1926.
Synthetic aromatic chemicals	156,141	152,212
Medicinals, photographic developers, intermediates, and other coaltar chemicals	1,983,465	1,576,314
Color lakes	26,038	20,722
Total values	$1,021,258	$909,355

Varieties of Dyes Imported

	Percent	
	1927.	1926.
Acid dyes	15.61	16.99
Vat dyes	41.14	39.55
Mordant and chrome dyes	11.72	10.70
Direct dyes	17.25	17.24
Sulphur dyes	3.30	3.20
Basic dyes	7.97	8.70
Spirit-soluble and color-lake dyes	3.01	1.84
Unidentified, unclassified special dyes	....	1.78
	100.00	100.00

Detailed Classification of Chief Imported Dyes

Dyes of each class, according to method of application, imported in largest quantity during the calendar year 1927[1], compared with imports in 1926, 1925, 1924, and the fiscal year 1914 as follows:—

Acid Dyes

Color Index No.		Pounds 1927.	1926.	1925.	1924.	1914.
671	Erioglaucine	57,084	71,502	35,295	28,655	66,526
714	Patent blue A	32,737	20,899	31,097	10,715	63,744
1054	Alizarin saphirol B	31,056	41,945	30,425	40,600	77,148
..	Brilliant wool blue F F R	29,073	8,681	6,376	[2]	[2] ....
833	Wool fast blue B L G L	21,541	29,468	30,248	4,940	19,238
..	Brilliant milling blue	20,506	19,308	8,400	6,200	9,966
807	Acid milling black B	19,844	11,022	17,635	9,484	69,590
480	Polar red G, R	19,843	26,145	28,584	7,756	2,821
691	Fast green extra bluish	19,769	23,993	18,967	30,721	14,347
712	Patent blue V	17,210	16,857	24,892	23,606	196,228
785	Naphthalene green V	17,137	18,539	15,299	4,357	22,144
667	Erioviridine B	16,111	14,977	13,946	4,796	40,868
715	Cyanol	14,782	13,614	8,995	3,688	40,015
..	Acid black 2 R	13,923	4,210	....	....	....
..	Indocyanine	13,574	51,295	16,521	[2]	23,138
..	Polar orange	12,236	11,021	13,386	2,204	805
..	Novazol blue	10,470	2,425	661	....	....
..	Neolan blue	10,139	16,090	8,813	220	....
62	Brilliant sulphon red	10,100	6,500	9,923	11,373	4,871
..	Xylene fast blue F F	9,118	6,001	....	....	....

Vat Dyes[4]

..	Helindone printing black RD paste	123,000	75,000	68,000	8,300	....
1184	Brilliant indigo 4 B	96,191	65,711	92,300	5,783	16,880
1115	Indanthrene blue G C D	82,268	134,832	139,876	68,450	478,980
1151	Indanthrene brown R	80,296	37,111	59,033	71,313	1,596
1095	Anthraflavone G C	74,173	41,002	73,816	35,936	7,143
..	Vat golden yellow G K	65,880	1,000	....	....	....
1212	Indanthrene red violet R H	61,888	111,779	69,107	29,037	27,874
1150	Indanthrene olive R	61,463	56,114	22,772	30,665	13,334
1229	Ciba red R	50,262	111,320	85,084	17,635	1,001
1190	Brilliant indigo B	46,836	32,920	12,455	11,218	8,175
1118	Indanthrene yellow G	45,442	63,326	111,713	39,771	12,683
1097	Indanthrene golden orange R R T	45,107	53,826	90,730	112,339	50,496
..	Hydron pink F F	39,650	21,041	63,052	50,460	....
..	Indanthrene green G, G G	35,930	14,148	36,186	3,800	....
1228	Ciba scarlet	35,557	142,785	123,473	40,200	22,265
1152	Indanthrene brown G	34,094	54,420	51,813	18,155	....
..	Vat printing brown R	27,800	14,182	4,000	....	....
1069	Indanthrene dark blue B O	24,578	27,932	27,961	2,943	11,066
1162	Indanthrene red R K	23,452	20,584	30,267	58,520	6,056
1217	Helindone orange R	23,240	22,740	63,608	37,077	14,489

Mordant and Chrome Dyes

1027	Alizarin, synthetic	89,210	86,606	75,174	42,695	202,392
1084	Alizarin viridine F F	31,188	17,634	21,798	5,778	....
804	Gallamine blue	29,132	18,197	36,021	....	2,756
204	Eriochrome black A	26,455	....	....	....	96,570
1064	Alizarin cyclamine R	20,399	8,372	15	796	....
1033	Alizarin orange A	16,662	7,098	24,450	15,202	14,239
720	Eriochrome azurol B C	16,148	19,886	28,093	12,664	21,060
1088	Alizarin pure blue B	14,588	31,612	34,352	20,729	19,471
1034	Alizarin red S	14,463	11,119	14,402	3,611	53,154
1037	Purpurine	10,000	10,948	28,281	271	....
1040	Alizarin red S X	8,363	8,580	12,506	11,773	....
1067	Alizarin blue S	8,359	7,180	16,359	8,152	21,231
..	Metachrome blue black	8,354	15,353	15,000	9,500	399
1085	Alizarin blue black B	8,078	7,147	51,066	78,195	54,706
219	Eriochrome flavine A	7,714	4,408	3,306	6,614	....
..	Eriochrome red G	6,612	4,959	[3]4,949	2,204	....
..	Acid alizarin gray G	6,288	8,875	8,705	7,025	....
723	Chromazurol S	6,061	4,408	2,204	551	....
1019	Alizarin black S	5,741	3,727	1,398	2,111	200,743
892	Modern violet	5,618	8,315	7,983	1,925	....

Direct Dyes

70	Rapidsfast red G L	41,525	14,500	[6]....	[6]....	....
382	Chloramine red B, 3 B	29,523	34,599	16,899	3,550	28,887
..	Chlorantine fast blue	26,783	40,446	28,435	17,268	....
816	Diaminogene blue	24,626	28,395	31,943	23,970	8,368
..	Chlorantine fast violet	23,199	37,576	33,941	4,849	....
..	Brilliant sky blue	22,380	20,939	22,961	4,735	4,002
..	Benzo fast brown	21,308	17,496	9,004	5,976	9,782
561	Trisulphon brown B	21,022	18,509	25,815	24,020	16,781
..	Diazo sky blue	19,996	22,599	2,776	4,785	6,370
..	Rapid fast orange R G	19,350	700	[7]2,980	....	....
..	Rapid fast red G L	19,050	[8]2,850	[8]8,593	....	....
..	Diamine fast orange	17,957	11,938	12,000	11,763	17,387
577	Trisulphon brown G G	16,002	11,015	10,007	14,754	7,562
..	Chlorantine fast brown	14,700	15,431	34,268	30,202	....
436	Chloramine red 8 B S	12,431	21,930	28,631	11,608	14,305
653	Pyrazol orange G, R	11,200	5,806	[10]25,165	17,118	1,256
..	Chlorantine fast green B	10,912	6,061	5,400	991	....
..	Diazol light red N 8 B	9,469	8,816	220	....	....
..	Diphenyl brown B B N C	8,820	6,612	6,614	[6]....	[6]....
..	Benzo fast yellow R L	8,544	6,667	6,862	[6]....	[6]....

Basic Dyes

749	Rhodamine B	[11]103,495	[11]133,945	[11]228,105	[11]97,254	59,354
..	Rhodamine 6 G D N	[11]36,500	[11]61,050	[11]75,700	[12]....	[12]....
797	Euchrysine	20,100	18,080	15,022	4,525	15,403
729	Victoria blue B	19,858	18,057	13,389	4,533	127,769
793	Phosphine	17,625	10,250	27,760	24,300	101,858
927	New methylene blue	13,249	6,300	8,200	3,245	30,392
680	Methyl violet	11,251	9,647	250	703	255,063
677	Magenta	11,190	12,777	2,360	355	87,102
676	Pararosaniline base	10,000	....	100	[9]....	....
706	Methyl Lyons blue	9,259	7,716	10,882	....	55
682	Ethyl violet	8,100	3,000	4,000	2,000	51,933
815	Thioflavine T	7,485	4,500	4,842	6,842	35,224
851	Diphene blue	7,100	7,341	4,331	2,500	4,738
658	Setoglaucine	6,978	5,750	5,741	3,867	....
681	Crystal violet	6,350	4,190	9,377	4,239	51,872

Sulphur Dyes

1	Thional green	47,109	41,304	....	....	....
2	Indocarbon	33,901	9,950	50	....	....
3	Thionol yellow	14,733	10,960	4,970	....	....
4	Thionol brown, O, R	11,289	18,110	18,383	16,060	....
5	Katigene chrome blue 3 G	4,809	1,752	584	....	1,407

[1] Preliminary figures.
[2] Included in Schultz No. 562.
[3] Included in indamine 6 R.
[4] Single strength.
[5] Includes eriochrome red R.
[6] Separate figures not obtainable.
[7] Includes rapid fast orange B G.
[8] Includes rapid fast red B.
[9] Includes several types of red.
[10] Approximate figures.
[11] Single strength basis.
[12] Included in Schultz No. 571.

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Dyestuffs and Tanstuffs: Market Review

Conditions surrounding the market for dyestuffs and tanning materials at the beginning of 1927 contained many elements of potential strength. These elements were inevitably reflected in higher prices for a number of the more important commodities grouped under this head within a few weeks of the opening of the year.

Tanning materials were not in large supply. During the latter half of 1926 none of them had been imported in much volume. Importers had such difficulty in finding a ready outlet for shipments that practically none of the bulkier items were imported unless on direct order. For this reason stocks of myrobalans, divi divi, Sicilian sumac, valonia, and mangrove bark were extremely limited, and consumers nearly always had to place orders some time in advance of the time when they would actually need the material, in order to allow the importers to secure the shipments from the primary markets.

Primary markets in many instances were unsettled, disorganized, even demoralized at the beginning of 1927. Offerings were quite small because of bad crops or unfavorable climatic conditions at the time of harvesting, so that the final crop returns had been unusually small or else crops were damaged so as to have less commercial value than in other years. In one instance, an unusual and unforeseen demand had developed, with the buyers willing to pay lavishly for supplies immediately available. The competition in this case ran prices up far beyond anything seen before. Another instance was that of a greatly diminished consuming interest, lighter exports than ever before, and subsequent liquidation.

Influences bearing on the Chinese markets appeared wholly unbenign. The country was disrupted by civil strife and the movement of supplies of produce from the interior to the ports was uncertain and frequently interrupted for some weeks. Egg products were placed in an extremely strong position because of this interruption of the industrial routine. Chinese nutgalls were practically unobtainable during the first half of the year. Certainly, during the first three months of 1927 it was doubtful if more than a few odd lots were dispatched abroad from the Chinese ports. The exporters were disinclined to quote any firm prices because of the uncertainty of being able to make shipments. As February and March passed, quotations were refused almost entirely, as nothing could be assured, the movement of the nuts from the interior to the ports having been suspended, with no stocks of consequence in the ports for export. Blue Aleppo nutgalls were offered in moderate volume during the early part of the year, but there was not a great deal of demand for them. The prices, too, were deemed rather high, which kept consumers from buying any more than they actually needed for their manufacturing operations.

Egg Albumen Depressed

During January a deal of selling pressure was exerted in the market for egg albumen, so that prices were materially reduced. Importations during the last part of 1926 had been larger than ever before and stocks accumulated in the local market were excessive. If the movement of some materials from the Chinese market had been interrupted, importers had, however, been able to secure some large quantities of albumen. There had been talk of a shortage and importers took on quantities in excess of what they would have done under normal conditions. During January the presence of these stocks depressed the situation, as demand did not show any especial activity and buying was largely routine. Reductions of four and five cents per pound were made in a single week. Of course, towards the end of the first quarter of the year this state of affairs was greatly modified by the intensification of the unsettling influences in the Chinese political situation. Then the prices of egg albumen, which had been forced down, recovered in a measure and were more definitely maintained than earlier in the year.

Importations of egg yolk have always been smaller than those of albumen. During the last part of 1926 stocks of yolk offered for shipment from China had been small and frequently of very poor quality, so that only moderate quantities had been assembled in the New York market. The prices at the beginning of the year had disclosed transient weakness, the reflection of the distress in the albumen position. At that time minor reductions were made in the prices. This, however, did not last for long, as demand became marked by the early part of February and the prices were established on a firm basis which was not shaken for a long time.

During the first three months of the year advances were general in the prices of the more important tanning materials. Those coming from the Near and Far East were particularly affected, moving up sharply in the course of a few weeks. The solitary exception to this rule of advance was Sicilian sumac, which showed pronounced weakness during January, although a slight recovery in February was registered. This recovery, however, did not last very long for by the end of March prices had again been sharply reduced, and the material was available for shipment from Italy at the lowest prices in several years.

The reasons for the declines in sumac were not obscure or difficult to locate. The 1926 crop had been fairly successful. The quality had been excellent, and if it was not as large as that of 1925, there had been a substantial carryover from the previous year, so that at the beginning of 1927 there were large stocks of sumac in the Italian factors' hands. During the fall of 1926 buying by European and American tanners had shown a decline from previous years. This continued all winter. By the beginning of 1927 it was apparent that sales to America would be hardly half what they had been during the preceding year, while sales to other European countries also showed an appreciable decline, causing Italian exporters more anxiety. The competition in the material became sharper, with most attractive concessions to buyers. Unfortunately for the stability of the price these concessions were not taken advantage of, and prices were rapidly forced down. Losses of $25 per ton were registered between the first of January and the end of March.

Russians Buy Valonia

About the middle of January cables from the Smyrna market quoted much higher prices for valonia beards and mixtures. Within a few weeks the shipment prices had been substantially increased. Stocks were obviously much reduced. Russian buyers had come into the market at the beginning of the year and had bought large quantities. The proximity of Russia to the primary market naturally made that country the logical outlet for this material. The Russian buyers were not disposed to balk at prices; they wanted the material and were willing to pay for it. Their bidding ran the prices up to levels which caused American buyers to stop short, although there was an authentic need for the material, as it is a valuable tanning agent and still employed extensively in this country. The heavy Russian demand reduced stocks in the primary market radically. During March there was some buying for American consumption of the beards, but the price of the mixtures was altogether too high for the taste of the tanners here, and that market, as far as business with this country was concerned, lapsed into an almost entirely nominal one.

With the biggest crop in years, it was felt that the prices of myrobalans would remain fairly cheap. During the fall of 1926, reductions in prices had been made and costs to import were materially less than they had averaged during earlier months of the year. However, shortly after the turn of the year, the Indian tanning season opened and the native tanners began to use large quantities for their operations. Desirable grades were rapidly reduced and prices correspondingly enhanced. Importers urged the American users to cover requirements early in February, but as conditions in the tanning trade were not particularly brisk at that time, buying was delayed and eventually, in March, when a livelier interest was aroused, the import costs had materially increased and consumers were forced to pay many dollars more for goods which they could have secured a month earlier at prices not wholly unreasonable.

Gambier in Plentiful Supply

During February the market for gambier weakened and lower prices were established for spot goods. The changes in the spot market were not the result of fluctuations in the primary markets, but rather the outcome of conditions wholly local. There had been ample importations since the beginning of the year. Conditions in the primary markets had been favorable to generous foreign shipments and world supplies were approximately normal. Shipment prices had varied little during January or February. The output of the factories was maintained, export shipments went forward according to schedule and local importers got their lots when they expected them. Buying was rather quiet during the latter part of January and the early part of February. The leather trade was not taking on supplies of raw materials in as much volume as had been expected. The silk trade was a very irregular taker. The competition of the local situation induced minor shadings when firm orders were in the market, which eventually led, towards the end of February, to readjustments in open quotations for the different grades. Common, plantation and Singapore cubes were all reduced, the cubes quite substantially. Common showed the steadiest trend of any, possibly because the demand for it was most consistent. The extract was also cut in price.

The new crop of annatto seed was much later coming to market than usual. It was not until well into March that any sizable lots were received here. Little news had been forthcoming previous to the arrival of these shipments about the state of the crop. Information from primary points was vague and uncertain. Some difficulty was experienced in getting shipments through, although finally, when goods did arrive, prices in this city reacted sharply, and values lower than anything in the preceding two or three years were quoted.

Tanners Buy Bichromates

Manufacturers of bichromates entered the year in an excellent position. The contract prices which had been announced during the fall had proved eminently attractive to the consumers, who had covered requirements thoroughly for the year. There were no unforeseen developments during the first quarter of 1927. Manufacturers were able to make shipments of bichromates of soda and potash in volume fully up to the contract schedules as well as to fill a multitude of small orders which came to hand for immediate attention.

The prices during this period were definitely maintained, there were no undue accumulations of stocks, and a substantial foreign movement provided an outlet for any excess production which manufacturers undertook. Throughout the year, in fact, quotations were steadily maintained with the range of 6¼c. to 6¾c. per pound, depending on the size of orders. Shipments went through in exceptionally good volume during the summer months, considered by many as the most trying period of the year. Export business continued of comparatively good dimensions with total shipments in the first nine months of the year reaching some 6,750,000 pounds, an increase of close to 1,400,000 pounds as compared with the corresponding preceding period. The volume of foreign buying in the last few months of the year did not bulk as large as it had in its early periods, but statistics on exportations for the eleven months ended with November gave total exportations of 7,902,670 pounds, of the value of $501,030, in contrast with some 7,639,137 pounds, valued at $474,336, in the same months of the year before.

The volume of domestic buying in progress throughout the fall months was satisfactory to the producers in the main. Tanners expanded their operations materially at this period and there was consequently a substantial amount of bichromate shipped. In the late fall the leading domestic manufacturers announced that the contract prices of 6¼c. to 6¾c. per pound for soda bichromate, and 8c. to 8½c. per pound for potassium bichromate would be continued for 1928 deliveries. The attractiveness of this price structure was attested in the fact that in the last few weeks of 1927 consumers came into the market in volume and placed contracts for quantities surpassing those engaged during the contract period the year before.

Soda Acetate Advanced

A number of other chemical mordants showed evidences of increasing strength as the end of 1927 neared. In the case of sodium acetate which had opened the year on a basis of 4¾c. per pound but had reacted to 4½c. during the early spring and late summer months, there was a rather substantial betterment of conditions in the closing days of the year, when, in consequence of a pronounced scarcity which had developed, prices were raised rather abruptly to 5¾c. per pound. Stocks had shown a remarkable shrinkage at the close of the year and holders were no longer offering in car lots.

The contract movement in both soda and potash prussiate proved ample to maintain values, and makers were having their hands full taking care of consumers' requirements. Yellow prussiate of potash had started the year at a basis of 19c., but competition became somewhat keener during the early fall months when prices had reacted from the best levels until they touched 18c. per pound. This was still ½c. per pound better than the average low valuations which had been touched the year before. Soda prussiate had opened the year at a basis of 11¼c. per pound which was an improvement of about 1¼c. per pound over the price levels that had ruled for the greater part of the year before. It was evident as the year wore on that producing interests had the product under close control at all times, for an advance of 1c. per pound was placed into effect during January and February to 12¼c. This came partially in reflection of higher raw material costs as well as in keeping with the general increase in overhead. During the last three quarters of the year manufacturers adhered rigidly to a minimum basis of 12c. per pound, and at no time was there any suggestion that supplies could be picked up for any less.

Corn Starches and Dextrin

Although manufacturers of corn dextrin and corn starches were successful in keeping their establishments pretty well occupied during the greater part of 1927, there appeared to be keen competition for business, and, contrary to the usual experiences, price fluctuations bore little or no reference to the actual conditions prevailing in the raw material markets. From January to April, manufacturers of corn starches were successful in maintaining values at $3.42 per 100 pounds. Ignoring the threatened short crop of corn which was playing such havoc with valuations on the country's leading grain exchanges during the early spring and late summer months the manufacturers subsequently made a deep cut in corn starches to $3.07 per 100 pounds. Foreign buying in this period had reached formidable totals. In the first eleven months of the year the total was some 213,511,571 pounds, of the value of $6,588,986, in contrast with 181,530,635 pounds, of the value of $5,552,406, in the corresponding eleven months of 1926.

Dextrin, British gum, pursued an almost similar course during the same interval. During the first five months of the year prices were pegged on a basis of $4.12 per 100 pounds, but there was a break of 35c. per 100 pounds in May which established values at $3.77 per 100 pounds, which was the year's closing level. Domestic goods were supplemented by the arrival of some 22,949,555 pounds of British gum valued at $934,197 in the first eleven months of the 1927 calendar year, which compared with importations of 19,804,781 pounds in the corresponding period of the year before. After ruling firm for months within the range of 6c. to 6½c. per pound, potato starches weakened in the closing days of 1927 to 5¾c. The pronounced subnormality of last season's European potato crop, the output in Germany and several other countries having fallen well below expectations, strengthened the foreign grades to a point where they commanded 6¾c. to 7¼c. per pound at one time. However, the import movement for 1927 had been on an even broader scale than in the year before, so that prices for the domestic product failed to respond. In fact, total importations of starches in the first eleven months of the year were 27,466,291 pounds of the value of $1,061,518, compared with 20,632,542 pounds valued at $707,896 in the corresponding preceding period.

Albumen Shipments Decline

Shipments of egg products out of China did not reach particularly impressive totals until well along in the season or about in midsummer. Finding then that stocks were ample, importers lowered prices during the late summer and early fall months until they got down to a basis of 83c. per pound for egg albumen. With the termination of the shipping season from China in the middle of November there came a sharp appreciation in prices both for egg yolk and egg spray, these touching 70c. to 72c. per pound in kegs, and 78c. to 80c. per pound, respectively.

While the actual production season in China stopped in November, with no new goods offered for shipment prior to the following spring or in April-May, a few belated shipments continued to reach this market, resulting in occasional offers at concessions. A glimpse at the import statistics shows that some 2,774,477 pounds of dried egg albumen of the value of $1,600,476 were imported during the first eleven months of last year, as compared with 3,225,195 pounds valued at $2,284,005 in the same time the year before.

Keen European Competition

European interests were dominating the markets both in the Near and the Far East in a great number of tanning and dyeing materials as 1927 went out. There was a big curtailment in the American import movement and the trend of prices was constantly upward. Products like valonia, myrobalans, divi-divi, wattle bark, and mangrove bark were difficult, if not impossible, to secure. Primary markets were combed for stocks, but steady decreases in output over a decade past were still making themselves felt, and no one seemed particularly optimistic with reference to the return at an early date of anything approaching normal conditions.

Sicilian sumac was an exception to this rule. It had started the year a

$82 per ton, but a series of monthly reductions finally brought it down to $62 per ton. The encroachment of other tanning materials into the field formerly occupied by sumac was responsible for the greater part of the weakness. In fact, Italy's output went begging at times, and in not a few instances a marked preference was shown instead for quebracho and other products. Fustic and logwood extracts attracted a lot of attention from the dye trade. Manufacturers' scheduled prices for these were pretty well adhered to during the year.

Comparative Values

A study of comparative statistics contained in the Oil, Paint and Drug Reporter weighted index numbers compiled from nineteen typical dyestuffs and tanstuffs on the basis of 100 at August 1, 1914, shows that consumers secured the benefits of lower valuations on a great many products in the closing days of 1927. There was a net advance of 2.6 points in the average quotations to the consumer between January 1 and April 1. Thereafter the trend became reactionary, until at the end of the year an average net loss of 14.5 points to 163.4 had been registered. The appended tabulation gives comparative index numbers for the four quarters of the year as well as for December 31, with comparative figures for the year before:—

	1927			
Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
175.3	177.9	176.9	167.6	163.4
	1926			
Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
190.4	187.0	183.2	178.3	177.5

Dyestuffs and Tanstuffs: Record of Prices

Chemicals

Antimony Salt

October 18, 1871, the price was 11c. per pound; 1881, 6c.; 1891, 4c.; 1901, 16c.; 1911, 12c.; 1913, 11½c.; 1918, November, 75c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.28	$0.27	$0.28	$0.27
February	.28	.28	.27	.27
March	.30	.28	.27	.26½
April	.28	.28	.26½	.26½
May	.28	.28	.26½	.26½
June	.28	.28	.26½	.26½
July	.28	.28	.26½	.26½
August	.28	.28	.26½	.25½
September	.28	.28	.25½	.25½
October	.28	.28	.25½	.25½
November	.28	.28	.25½	.25½
December	.28	.28	.25½	.25½
Year	.30	.27	.28	.25

Soda Acetate

October 18, 1871, the price was 5Sc. per pound; 1881, 40c.; 1891, 3¾c.; 1901, 4¼c.; 1911, 4c.; 1913, 3¾c.; 1918, July, 35c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04½	$0.04½	$0.04¾	$0.04¾
February	.04½	.04½	.04¾	.04¾
March	.04½	.04½	.04¾	.04½
April	.04½	.04½	.04½	.04½
May	.04½	.04½	.04½	.04½
June	.04½	.04½	.04½	.04½
July	.04½	.04½	.04½	.04½
August	.04½	.04½	.04½	.04½
September	.04½	.04½	.04½	.04½
October	.04½	.04½	.05	.04½
November	.04¾	.04½	.05	.05
December	.04¾	.04¾	.05¾	.05
Year	.04¾	.04½	.05¾	.04½

Potash Prussiate, Yellow

October 18, 1871, the price was 41c. per pound; 1881, 23c.; 1891, 23¾c.; 1901, 13½c.; 1911, 13c.; 1913, 14c.; 1918, January, $1.30.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.18½	$0.18½	$0.19	$0.19
February	.18½	.18¼	.19	.18½
March	.18¼	.18¼	.18½	.18½
April	.18¼	.18¼	.18½	.18½
May	.18¼	.18¼	.18½	.18¼
June	.18	.18	.18½	.18¼
July	.18	.18	.18¼	.18¼
August	.18	.18	.18¼	.18¼
September	.18¼	.18	.18¼	.18
October	.18	.17½	.18½	.18
November	.17½	.17½	.18	.18
December	.19	.17½	.18	.18
Year	.19	.17½	.19	.18

Potash Bichromate

October 18, 1871, the price was 23c. per pound; 1881, 16c.; 1891, 9⅝c.; 1901, 8¼c.; 1911, 7⅜c.; 1913, 6⅜c.; 1917, September, 50c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08½	$0.08⅜	$0.08	$0.08
February	.08¼	.08¼	.08	.08
March	.08¼	.08¼	.08¼	.08
April	.08¼	.08¼	.08¼	.08¼
May	.08¼	.08¼	.08¼	.08¼
June	.08¼	.08¼	.08¼	.08¼
July	.08¼	.08¼	.08¼	.08¼
August	.08¼	.08¼	.08¼	.08¼
September	.08¼	.08¼	.08¼	.08¼
October	.08¼	.08	.08¼	.08¼
November	.08	.08	.08¼	.08
December	.08	.08	.08¼	.08
Year	.08½	.08	.08¼	.08

Soda Bichromate

October 18, 1881, the price was 14¾c. per pound; 1891, 8c.; 1901, 6¼c.; 1911, 5⅝c.; 1913, 4⅝c.; 1919, December, 35c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06½	$0.06⅜	$0.06¼	$0.06¼
February	.06⅜	.06⅜	.06¼	.06¼
March	.06⅜	.06⅜	.06¼	.06¼
April	.06⅜	.06⅜	.06¼	.06¼
May	.06⅜	.06⅜	.06¼	.06¼
June	.06⅜	.06⅜	.06¼	.06¼
July	.06⅜	.06⅜	.06¼	.06¼
August	.06⅜	.06⅜	.06¼	.06¼
September	.06⅜	.06⅜	.06¼	.06¼
October	.06⅜	.06¼	.06¼	.06¼
November	.06¼	.06¼	.06¼	.06¼
December	.06¼	.06¼	.06¼	.06¼
Year	.06½	.06¼	.06¼	.06¼

Soda Prussiate, Yellow

December 8, 1880, the price was 25c. per pound; October 18, 1891, 22c.; 1901, 10¼c.; 1911, 10¾c.; 1913, 10½c.; 1918, June, 75c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10¼	$0.10	$0.11¼	$0.11¼
February	.10	.10	.12¼	.12¼
March	.10	.10	.12¼	.12
April	.10	.10	.12	.12
May	.10	.10	.12	.12
June	.10	.10	.12	.12
July	.10	.10	.12	.12
August	.10	.10	.12	.12
September	.10	.10	.12	.12
October	.10	.10	.12	.12
November	.10	.10	.12	.12
December	.11¾	.10	.12	.12
Year	.11¾	.10	.12¼	.11¼

Tin Crystals

October 18, 1871, the price was 45c. per pound; 1881, 16½c.; 1891, 14c.; 1901, 20c.; 1911, 25½c.; 1913, 27½c.; 1918, September, 70c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.43	$0.43	$0.47	$0.46
February	.41½	.41½	.47½	.45½
March	.43	.43	.48	.47
April	.42½	.42½	.47	.46½
May	.42½	.42½	.46½	.46½
June	.41½	.41½	.45½	.44¼
July	.41½	.41½	.45	.44½
August	.43	.43	.45	.44½
September	.47½	.45½	.44½	.44
October	.48	.47	.42	.42
November	.48	.47	.41½	.41
December	.48½	.47	.42	.42
Year	.48½	.41½	.48	.41

Zinc Dust

March 23, 1881, the price was 15¼c. per pound; October 18, 1891, 7½c.; 1901, 5⅝c.; 1911, 7⅜c.; 1913, 6½c.; 1916, January, 35c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10	$0.10	$0.09½	$0.09½
February	.10	.10	.09¾	.09½
March	.10	.10	.10½	.09¾
April	.09	.09	.10	.09¾
May	.09	.09	.09¾	.09
June	.09½	.09	.09¼	.09
July	.09½	.09½	.09¼	.09
August	.10¼	.10	.09½	.09½
September	.10½	.10½	.09¼	.09
October	.10½	.10	.09	.09
November	.09½	.09¼	.09	.09
December	.09½	.09	.08	.08
Year	.10½	.09	.10½	.08

Dyestuffs and Sizes

Albumen, Egg

October 18, 1871, the price was $1.25 per pound; 1881, 75c.; 1891, 33c.; 1901, 35c.; 1911, 50c.; 1913, 42c.; 1918, July, $2.40.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.15	$1.10	$0.90	$0.90
February	1.10	1.05	.90	.90
March	1.05	1.03	.90	.90
April	1.03	.98	.94	.90
May	.97	.95	.94	.94
June	.95	.95	.94	.94
July	.95	.93	.94	.94
August	.95	.93	.86	.84
September	.95	.94	.84	.84
October	.95	.95	.83	.83
November	.95	.95	.83	.83
December	.95	.90	.83	.83
Year	1.15	.90	.94	.83

Annatto Seed

October 18, 1871, the price was 30c. per pound; 1881, 20c.; 1891, 10c.; 1901, 8c.; 1911, 32c.; 1913, 7c.; 1917, January, 17c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.14¼	$0.14	$0.08	$0.08
February	.14	.14	.08	.07½
March	.10¾	.09	.07½	.07
April	.08¼	.08	.07	.06½
May	.08¼	.08¼	.06½	.06½
June	.08¼	.08	.06½	.06½
July	.08	.08	.07	.07
August	.08	.08	.07	.07
September	.08	.08	.07	.07
October	.08	.07½	.07	.07
November	.07½	.07½	.07	.07
December	.08	.07½	.07¼	.07¼
Year	.14¼	.07½	.08	.06½

Cochineal, Gray Black

October 18, 1871, the price was 67½c. per pound; 1881, 43c.; 1891, 27c.; 1901, 20c.; 1911, 25½c.; 1913, 45c.; 1918, November, $1.

	Per pound			
	1926		1927.	
	H.	L.	H.	L.
January	$0.59	$0.56½	$0.82½	$0.77
February	.65	.59	.85½	.82½
March	.68	.67	.86½	.85½
April	.68	.67	.90	.86
May	.68	.68	.92	.90
June	.70	.68	.92	.92
July	.71	.70	.92	.92
August	.71	.70	.92	.87
September	.71	.71	.87	.87
October	.72	.70	.84	.83
November	.74	.72	.87	.84
December	.77	.74	.84	.84
Year	.77	.56½	.92	.77

Cutch, Borneo

October 18, 1871, the price was 4½c. per pound; 1881, 5⅞c.; 1891, 7⅛c.; 1901, 4¼c.; 1911, 5¾c.; 1913, 6c.; 1918, November, 27c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05½	$0.05¼	$0.06¾	$0.06¾
February	.05½	.05½	.07	.06¾
March	.06	.05½	.07	.07
April	.06	Nom.	.07¼	.07
May	.06	Nom.	.07¼	.07¼
June	.05½	.05½	.07¼	.07¼
July	.05½	.05½	.07¼	.07¼
August	.08	.05½	.07¼	.07¼
September	.08	.08	.07¼	.07
October	.08	.08	.07	.07
November	.08¼	.08	.07	.07
December	.08¼	.06¾	.07	.07
Year	.08¾	.05¼	.07¼	.06¾

Dextrin, Corn

October 18, 1871, the price was $8 per 100 pounds; 1881, $6.40; 1891, $6; 1901, $2.70; 1911, $2.87; 1913, $3.17; 1918, June, $9.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.92	$3.92	$4.12	$4.12
February	3.92	3.92	4.12	4.12
March	4.02	4.02	4.12	4.12
April	4.02	4.02	4.12	4.12
May	4.02	4.02	4.12	3.77
June	4.02	4.02	3.77	3.77
July	4.12	4.12	3.77	3.77
August	4.12	4.12	3.77	3.77
September	4.12	4.12	3.77	3.77
October	4.12	4.12	3.77	3.77
November	4.12	4.12	3.77	3.77
December	4.12	4.12	3.77	3.77
Year	4.12	3.92	4.12	3.77

Dextrin, Potato

May 24, 1881, the price was 8c. per pound; October 18, 1881, 7c.; 1901, 5½c.; 1911, 5½c.; 1913, 6c.; 1918, July, 20½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07¾	$0.07¾	$0.08½	$0.08½
February	.07¾	.07¾	.08½	.08½
March	.08	.07¾	.08½	.08¼
April	.08	Nom.	.08½	.08½
May	.08	Nom.	.08½	.08½
June	.07½	.07½	.08½	.08½
July	.07½	.07¼	.08½	.08½
August	.07¼	.07¼	.08½	.08
September	.07¼	.07¼	.08	.08
October	.07¼	.07¼	.07¾	.07¾
November	.08¾	.07¾	.09	.07¾
December	.08¼	.08½	.09	.08½
Year	.08¾	.07¼	.09	.07¾

Sago Flour

October 18, 1871, the price was 8¾c. per pound; 1881, 3¾c.; 1889, 4c.; 1901, 2¾c.; 1911, 2¾c.; 1913, 2¾c.; 1918, August, 10½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03½	$0.03½	$0.03½	$0.03½
February	.03½	.03½	.03½	.03½
March	.03½	.03½	.03½	.03½
April	.03½	.03½	.03½	.03½
May	.03½	.03½	.03½	.03½
June	.03½	.03½	.03½	.03½
July	.03½	.03½	.03½	.03½
August	.03½	.03½	.03½	.03½
September	.03½	.03½	.03½	.03½
October	.03½	.03½	.04¼	.03½
November	.03½	.03½	.04¼	.04¼
December	.03½	.03½	.04½	.04½
Year	.03½	.03½	.04½	.03½

Myrobalans JI

October 18, 1881, the price was $38 per ton; 1891, $35; 1901, $35; 1911, $23; 1913, $28; 1917, February, $68.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$59.00	$42.00	$41.00	$41.00
February	42.00	42.00	41.00	41.00
March	41.00	39.00	43.00	41.00
April	39.00	39.00	44.00	44.00
May	37.00	35.00	44.00	41.50
June	36.00	35.00	44.00	44.00
July	39.00	38.00	41.00	40.00
August	39.00	39.00	41.00	40.00
September	43.00	39.00	40.00	39.00
October	43.00	42.00	40.50	39.00
November	42.00	34.00	43.00	40.50
December	41.00	34.00	43.00	43.00
Year	59.00	34.00	44.00	39.00

Divi Divi

October 18, 1871, the price was $85 per ton; 1881, $70; 1891, $75; 1901, $32; 1911, $45; 1913, $45; 1919, November, $87.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$50.00	$48.00	$42.00	$40.00
February	50.00	47.50	45.00	44.00
March	49.00	46.00	47.00	44.00
April	46.00	40.00	49.00	47.00
May	39.00	38.50	49.00	47.00
June	39.00	38.50	47.00	47.00
July	39.00	39.00	47.00	47.00
August	39.00	38.50	47.00	47.00
September	39.00	38.50	50.00	49.00
October	39.00	39.00	50.00	50.00
November	40.00	39.00	50.00	50.00
December	40.00	39.00	52.00	50.00
Year	50.00	38.50	52.00	40.00

Fustic Sticks

October 18, 1871, the price was $22 per ton; 1881, $18; 1891, $26; 1901, $22; 1911, $22; 1913, $18; 1918, September, $80.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$28.00	$27.00	$27.00	$27.00
February	28.00	28.00	27.00	27.00
March	28.00	28.00	27.00	27.00
April	28.00	28.00	27.00	27.00
May	28.00	28.00	27.00	27.00
June	28.00	28.00	27.00	27.00
July	28.00	28.00	27.00	27.00
August	28.00	28.00	27.00	27.00
September	28.00	28.00	27.00	25.00
October	28.00	28.00	25.00	25.00
November	28.00	27.00	25.00	25.00
December	27.00	27.00	25.00	25.00
Year	28.00	27.00	27.00	25.00

Gambier, Common

October, 18, 1871, the price was 4¾c. per pound; 1881, 3⅞c.; 1891, 5c.; 1901, 5¼c.; 1911, 6¾c.; 1913, 4½c.; 1916, December, 40c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.11⅜	$0.11	$0.07¼	$0.07¼
February	.11	.10	.07½	.07¼
March	.09¼	.09¼	.07¼	.07¼
April	.09½	.09	.07¼	.07¼
May	.09	.08¼	.07¼	.07
June	.08½	.08½	.07¼	.07
July	.08½	.07¾	.07¼	.07¼
August	.08	.07¾	.07¼	.07
September	.08	.08	.07	.07
October	.07¾	.07¾	.06¾	.05¾
November	.08	.07¾	.06¾	.06½
December	.07¾	.07½	.07	.06¾
Year	.11⅜	.07½	.07½	.05¾

Logwood Sticks, Haitian

October 18, 1871, the price was $19 per ton; 1881, $18; 1891, $29; 1901, $15; 1911, $15; 1913, $15; 1918, September, $55.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$28.00	$28.00	$25.00	$25.00
February	28.00	28.00	25.00	25.00
March	28.00	28.00	25.00	25.00
April	28.00	28.00	25.00	25.00
May	29.00	28.00	25.00	25.00
June	29.00	28.00	25.00	24.00
July	28.00	28.00	24.00	24.00
August	28.00	28.00	24.00	24.00
September	27.00	27.00	24.00	24.00
October	27.00	27.00	24.00	24.00
Novmeber	25.00	25.00	24.00	24.00
December	25.00	25.00	24.00	24.00
Year	29.00	25.00	25.00	24.00

Starch, Corn, Powdered

October 18, 1871, the price was $3 per 100 pounds; 1881, $2.85; 1891, $2.80; 1901, $1.88; 1911, $2.20; 1913, $2.24; 1919, September, $7.25.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.22	$3.22	$3.42	$3.42
February	3.22	3.22	3.42	3.42
March	3.22	3.22	3.42	3.42
April	3.22	3.22	3.42	3.42
May	3.22	3.22	3.07	3.07
June	3.32	3.32	3.07	3.07
July	3.42	3.32	3.07	3.07
August	3.42	3.42	3.07	3.07
September	3.42	3.42	3.07	3.07
October	3.42	3.42	3.07	3.07
November	3.42	3.42	3.07	3.07
December	3.42	3.42	3.07	3.07
Year	3.42	3.22	3.42	3.07

Starch, Potato

October 18, 1871, the price was 3¾c. per pound; 1881, 3¾c.; 1891, 3½c.; 1901, 3¾c.; 1911, 4c.; 1913, 5c.; 1918, April, 15¼c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06½	$0.06¼	$0.06¼	$0.06½
February	.06½	.06½	.06½	.06¼
March	.06¼	.06¼	.06½	.06¼
April	.06¼	.06¼	.06¼	.06¼
May	.06¼	Nom.	.06¼	.06¼
June	.06½	Nom.	.06½	.06¼
July	.06½	Nom.	.06¼	.06¼
August	.06½	Nom.	.06¼	.06¼
September	.06½	Nom.	.06¼	.06
October	.06½	Nom.	.06¼	.06¼
November	.06½	.06½	.06½	.06½
December	.06½	.06½	.05¾	.05½
Year	.06½	.06¼	.06½	.05¾

Sumac, Sicilian, Ground

October 18, 1871, the price was $110 per ton; 1881, $75; 1891, $65; 1901, $48; 1911, $51; 1913, $815; 1919, February, $150.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$115.00	$100.00	$82.00	$82.00
February	100.00	100.00	82.00	75.00
March	100.00	100.00	75.00	74.00
April	100.00	100.00	73.00	70.00
May	100.00	100.00	78.00	73.00
June	100.00	100.00	76.00	72.00
July	100.00	100.00	72.00	72.00
August	100.00	100.00	72.00	70.00
September	100.00	75.00	70.00	70.00
October	75.00	74.00	70.00	62.00
November	86.00	82.00	70.00	62.00
December	86.00	82.00	62.00	62.00
Year	115.00	74.00	82.00	62.00

Tapioca Flour

October 18, 1871, the price was 6c. per pound; 1881, 4½c.; 1891, 3c.; 1911, 4¼c.; 1913, 3½c.; 1918, June, 18c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03½	$0.03½	$0.03½	$0.03½
February	.03½	.03½	.03½	.03½
March	.03½	.03½	.03½	.03¼
April	.03½	.03¼	.03¼	.03¼
May	.03½	.03½	.03½	.03½
June	.03½	.03½	.03½	.03½
July	.03½	.03½	.03½	.03½
August	.03½	.03½	.03½	.03½
September	.03½	.03½	.03½	.03¼
October	.03½	.03½	.03½	.03¼
November	.03½	.03½	.03½	.03¼
December	.03½	.03½	.03½	.03
Year	.03½	.03½	.03½	.03

Tanning Materials

Fustic Extract, Solid

October 18, 1871, the price was 14½c. per pound; 1881, 11c.; 1891, 9½c.; 1901, 8¾c.; 1911, 8c.; 1913, 8c.; 1916, January, 55c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15	$0.15	$0.14	$0.14
February	.15	.15	.14	.14
March	.15	.14	.14	.14
April	.14	.14	.14	.14
May	.14	.14	.14	.14
June	.14	.14	.14	.14
July	.14	.14	.14	.14
August	.14	.14	.14	.14
September	.14	.14	.14	.14
October	.14	.14	.14	.14
November	.14	.14	.14	.14
December	.14	.14	.14	.14
Year	.15	.14	.14	.14

Fustic, Extract, Crystals

October 18, 1871, the price was 12½c. per pound; 1881, 11c.; 1891, 9½c.; 1901, 8c.; 1911, 8c.; 1913, 6c.; 1916, January, 60c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.20	$0.20	$0.18	$0.18
February	.20	.20	.18	.18
March	.20	.20	.18	.18
April	.20	.20	.18	.18
May	.20	.20	.18	.18
June	.20	.20	.18	.18
July	.20	.20	.18	.18
August	.20	.20	.18	.18
September	.20	.20	.18	.18
October	.20	.18	.18	.18
November	.18	.18	.18	.18
December	.18	.18	.18	.18
Year	.20	.18	.18	.18

Logwood Extract, Solid

October 18, 1871, the price was 9½c. per pound; 1881, 8¼c.; 1891, 7¼c.; 1901, 8c.; 1911, 6c.; 1913, 6c.; 1916, January, 90c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.11	$0.11	$0.10	$0.10
February	.11	.11	.10	.09½
March	.11	.11	.09½	.09½
April	.11	.11	.09½	.09½
May	.11	.11	.09½	.09½
June	.11	.11	.09½	.09
July	.11	.11	.09	.09
August	.11	.11	.09	.09
September	.11	.11	.09	.09
October	.11	.10	.09	.08
November	.10	.10	.08	.08
December	.10	.10	.08	.08
Year	.11	.10	.10	.08

Quebracho Extract, Solid

August 16, 1881, the price was 4¼c. per pound; October 18, 1891, 3½c.; 1901, 4¾c.; 1911, 4¾c.; 1913, 4¾c.; 1916, January, 20c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04¾	$0.04¾	$0.05¾	$0.05¾
February	.04¾	.04¾	.05¾	.05¾
March	.04¾	.04¾	.05¾	.05¾
April	.04¾	.04¾	.05¾	.05¾
May	.04¾	.04¾	.05¾	.05¾
June	.04¾	.04¾	.05¾	.05¾
July	.05¾	.04¾	.05¾	.05¾
August	.05¾	.05¾	.05¾	.05¾
September	.05¾	.05¾	.05¾	.05¾
October	.05¾	.05¾	.05¾	.05
November	.05¾	.05¾	.05	.05
December	.05¾	.05¾	.05	.05
Year	.05¾	.04¾	.05¾	.05

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Quercitron, Solid

October 18, 1871, the price was 2c. per pound; 1881, 7c.; 1891, 6½c.; 1901, 3c.; 1911, 2¾c.; 1913, 2¾c.; 1916, January, 30c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.09	$0.08½	$0.08½
February	.09	.09	.08½	.08½
March	.09	.09	.08½	.08½
April	.09	.09	.08½	.08½
May	.09	.09	.08½	.08½
June	.09	.09	.08½	.08½
July	.09	.09	.08½	.08½
August	.09	.09	.08½	.08½
September	.09	.09	.08½	.08½
October	.09	.08½	.06	.06
November	.08½	.08½	.06	.06
December	.08½	.08½	.06	.06
Year	.09	.08½	.08½	.06

Sumac Extract, Sicilian, Stainless

January 12, 1877, the price was 6c. per pound; October 18, 1881, 5¼c.; 1891, 6½c.; 1901, 7c.; 1911, 6½c.; 1913, 8c.; 1919, May, 16c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.11	$0.11	$0.09¾	$0.09¾
February	.11	.11	.09¾	.09¾
March	.10½	.10	.09¾	.09¾
April	.10	.10	.10½	.09¾
May	.10	.09¾	.11	.10½
June	.10	.09¾	.11	.11
July	.09¾	.09¾	.11	.11
August	.09¾	.09¾	.11	.11
September	.09¾	.09¾	.11	.11
October	.09¾	.09¾	.11	.11
November	.09¾	.09¾	.11	.11
December	.09¾	.09¾	.11	.11
Year	.11	.09¾	.11	.09¾

Necrological Record, 1927

The folowing list comprises the names of persons connected with the various industries in the field of the Oil, Paint and Drug Reporter, who died during 1927. Age, date of death, line of business, and the date of publication of the obituary notice are also given:—

	Age.	Date of death.	Line of business.	Date of publication.
Aldrich, Sherwood	58	July 3	Copper	July 11
Andrus, Alfred U.	81	Oct. 18	Crude drugs	Oct. 31
Armour, Charles W.	66	Mar. 22	Packer	Mar. 28
Armour, J. Ogden	63	Aug. 16	Packer	Aug. 22
Arrhenius, Dr. Svante	68	Oct. 2	Chemist	Oct. 10
Bauer, Gustav T.	58	May 18	Surgical supplies	May 28
Bearsted, Viscount	..	Jan. 17	Petroleum	Jan. 24
Bendig, Frederick H.	81	July 6	Paint manufacturer	July 11
Benkert, William O.	46	April 10	Drugs and chemicals	April 18
Boltwood, Prof. Bertram B.	57	Aug. 14	Chemistry teacher	Aug. 22
Bond, Richard Hewitt	60	Mar. 9	Spices and extracts	Mar. 14
Boyden, William S.	62	Sept. 21	Chemical manufacturer	Sept. 26
Brackett, P. W.	70	Dec. 6	Chemicals	Dec. 12
Bradley, J. Payson	79	April 19	Oils and tanners' supplies	May 2
Brooks, Alanson S.	65	Nov. 5	Wholesale druggist	Nov. 14
Brownell, Isaac A.	59	July 13	Cotton oil	July 18
Brush, Dr. Edward F.	80	Oct. 3	Proprietary manufacturer	Oct. 10
Casale, Dr. Luigi	45	Feb. 18	Chemist	Mar. 21
Chamberlin, Jeston N.	46	Feb. 6	Paint and varnish	Feb. 14
Clarke, C. K.	..	Mar. 21	Petroleum	Mar. 28
Colgate, Austen	64	Sept. 5	Soap manufacturer	Sept. 12
Constantin, Eugene B.	64	Mar. 27	Petroleum	April 4
Cooper, John D.	63	Oct. 6	Paint manufacturer	Oct. 10
Cooper, L. T.	52	Dec. 17	Proprietary medicines	Dec. 26
Cooper, Thomas G.	66	June 6	Oils and chemicals	June 13
Cowdray, Viscount	70	May 1	Petroleum	May 9
Curme, Dr. Henry R.	31	Mar. 16	Chemical manufacturer	Mar. 21
Daugherty, Daniel P.	75	July 23	Crude drugs	Aug. 1
Dausey, George A.	58	April 30	Tallow broker	May 9
DeWitt, Elden C.	72	Mar. 30	Proprietary medicines	April 11
Doerr, Henry	74	Aug. 10	Wholesale druggist	Aug. 22
Donnell, J. C.	72	Jan. 10	Petroleum	Jan. 17
Dumble, Edwin T.	74	Jan. 27	Retired oil geologist	Jan. 31
Fairchild, Samuel W.	75	Nov. 13	Manufacturing chemist	Nov. 21
Fenn, Sereno P.	83	Jan. 3	Paint manufacturer	Jan. 10
Fennell, C. T. P.	75	June 12	Pharmacy teacher	June 20
Fisk, H. J.	60	Nov. 18	Pharmaceutical manufacturer	Nov. 28
Flint, James G.	77	Sept. 7	Pharmaceutical manufacturer	Sept. 19
Gair, Robert	88	July 31	Container manufacturer	Aug. 8
Gates, Hoskison	60	May 23	Paint manufacturer	May 30
Gibson, Charles	72	Sept. 27	Wholesale druggist	Oct. 3
Gibson, Major Robert	93	June 2	Cottonseed	June 6
Glyn-Jones, Sir William S.	58	Sept. 9	Pharmacist	Sept. 12
Goetchius, Henry K.	..	Nov. 29	Chemical traffic manager	Dec. 5
Grasselli, Caesar A.	77	July 28	Chemical manufacturer	Aug. 1
Green, John W.	72	July 11	Essential oils	July 18
Greene, Howard J.	51	June 4	Paint manufacturer	June 13
Gregg, Norris B.	70	Sept. 6	Paint manufacturer	Sept. 12
Grove, Edwin W.	76	Jan. 27	Proprietary medicines	Jan. 31
Hascall, George C.	75	Dec. 20	Paint manufacturer	Dec. 26
Heath, Ernest Warren	69	Jan. 9	Paint manufacturer	Jan. 17
Hemm, Prof. Francis	70	Sept. 29	Pharmacy teacher	Oct. 3
Holmes, Prof. Mary E.	56	Mar. 13	Chemistry teacher	Mar. 21
Hopkins, Roger B.	..	Aug. 16	Petroleum	Aug. 22
Horstmann, Dr. Gustave	57	Feb. 15	Pharmacy teacher	Feb. 21
Humphreys, Dr. A. C.	76	Aug. 14	Gas engineer	Aug. 22
Humphreys, Albert E.	67	May 8	Petroleum	May 16
Kammer, Dr. Glenn D.	39	Nov. 7	Chemicals	Nov. 14
Kiely, John F.	..	Mar. 5	Petroleum chemist	Mar. 14
Koehler, Julius	61	Nov. 9	Essential oils	Nov. 14
Kondo, Dr. Shizuo	60	Nov. 9	Perfume manufacturer	Nov. 14
Laughlin, Robert D.	82	May 26	Petroleum	June 6
Lavanburg, Fred L.	64	Nov. 5	Dry colors	Nov. 7
Lawrence, William V.	85	May 16	Proprietary medicines	May 23
Leggett, Edward Howard	81	July 8	Paints and chemicals	July 11
Lenher, Victor	54	June 12	Chemistry teacher	June 20
Lewis, J. B.	58	Jan. 4	Naval stores	Jan. 17
Libbey, William	72	Sept. 6	Geology teacher	Sept. 12
Lipschitz, Dr. Charles W.	50	Sept. 19	Varnish manufacturer	Sept. 26
Little, Perry A.	..	June 21	Petroleum	June 27
Lucas, Alfred James	74	Aug. 1	Paint manufacturer	Aug. 15
Mabery, Prof. Charles F.	77	June 26	Chemistry teacher	July 4
Major, Alphonse	78	Mar. 9	Adhesives	Mar. 14
Manville, Charles B.	92	Nov. 26	Asbestos manufacturer	Dec. 5
Marshall, Dr. Charles E.	60	Mar. 20	Biologist	Mar. 28
Mattison, Richard V., jr.	47	May 23	Chemical manufacturer	May 30
McGhan, A. H.	61	Mar. 27	Master painter	April 4
McKallor, Edgar C.	57	Oct. 22	Wholesale druggist	Nov. 21
Merritt, William E.	46	Nov. 19	Fertilizer	Dec. 5
Meurer, Jacob	65	Jan. 23	Steel barrel manufacturer	Jan. 31
Miethe, Prof. Adolf	65	May 5	Chemist	May 9
Miller, Charles	84	Dec. 2	Petroleum	Dec. 26
Misson, Robert C.	..	April 16	Paints and varnish	April 25
Montrose, Nathaniel Frank	71	May 1	Wholesale druggist	May 9
Munson, Charles E.	76	Nov. 20	Pharmaceutical manufacturer	Dec. 12
Odeana, Fred M.	86	Oct. 20	Pharmaceutical manufacturer	Oct. 24
Ohrenschall, Frederick A.	84	Nov. 25	Perfume manufacturer	Dec. 5
Olcott, Ellsworth L.	71	Jan. 1	Wholesale druggist	Jan. 10
Orndorff, Prof. W. B.	65	Nov. 1	Chemistry professor	Nov. 7
Owen, John D.	54	Sept. 8	Wholesale druggist	Sept. 19
Phillips, William D.	52	June 5	Wholesale druggist	June 27
Pierce, Henry Clay	78	June 27	Petroleum	July 4
Pile, Gustavus	83	May 12	Druggist	May 23
Power, Dr. Frederick B.	74	Mar. 26	Chemist	April 4
Reardon, Paul F.	76	Nov. 25	Carbon black	Dec. 5
Redpath, Dr. Robert W.	49	Nov. 22	Pharmaceutical manufacturer	Nov. 28
Remsen, Dr. Ira	81	Mar. 4	Chemist	Mar. 14
Robinson, Arthur Lee	55	Mar. 28	Asphalt	April 4
Ryder, Thomas J.	62	Jan. 21	Petroleum	Jan. 24
Sauer, Cuno F.	61	Nov. 23	Flavoring extracts	Nov. 28
Schaefer, J. Louis	59	Feb. 5	Soda nitrate	Feb. 14
Sheldrick, Richard	63	Oct. 5	Chemicals	Oct. 10
Sherrill, Andrew M.	73	Oct. 26	Oils and greases	Oct. 31
Smith, Douglas	66	Nov. 7	Dentifrice manufacturer	Nov. 14
Stichel, Edward H.	64	June 30	Linseed oil	July 4
Sutphen, William P.	..	Feb. 1	Zinc manufacturer	Feb. 7
Talbot, Dr. H. P.	63	June 18	Chemistry teacher	June 27
Taussig, N. W.	..	July 9	Chemical manufacturer	July 18
Thompson, Sheldon, sr.	72	Aug. 9	Paint manufacturer	Aug. 15
Thuma, O. B.	55	May 15	Wholesale druggist	May 23
True, Henry Oscar	70	June 14	Paint manufacturer	June 27
Turpin, F. E.	79	Jan. 23	French chemist	Jan. 31
Tyree, Dr. J. S.	72	April 11	Proprietary medicines	April 25
Van Dyck, Dr. F. C.	82	April 11	Physics teacher	April 18
Varn, J. E.	46	Jan. 4	Naval stores	Jan. 17
Walcott, Dr. Charles D.	77	Feb. 9	Geologist	Feb. 14
Wetherill, William H.	89	May 19	Paint manufacturer	May 23
White, Dr. Israel C.	79	Nov. 24	Petroleum geologist	Nov. 28
Whitney, Prof. Milton	67	Nov. 11	Soil chemist	Nov. 14
Whitney, Wm. H., jr.	57	Mar. 6	Paint and varnish	Mar. 14
Williams, T. J.	70	Mar. 8	Petroleum	Mar. 14
Wilson, Rufus R.	43	Feb. 7	Fertilizers	Feb. 14
Winkelmann, John H.	85	May 22	Wholesale druggist	May 30
Wrisley, Allen B.	91	Dec. 19	Soap manufacturer	Dec. 26
Zevely, James W.	65	June 10	Petroleum	June 20

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Drugs and Fine Chemicals: Market Review

Business in the drug and fine chemical market during 1927 was of good volume and fairly satisfactory in the matter of profits. It was a year in which marked changes in business enterprises everywhere were common. The tendency in the United States was toward consolidation of business houses having related interests. Especially was there a tendency for sellers of raw materials and manufacturers of finished products to draw more closely together if not actually to merge. It was evident, further, that many negotiations begun in 1927 would come to fruit in the succeeding year. One 1927 merger of major importance joined two of the oldest chemical houses in the country.

The tendency abroad was toward closer co-operation between the larger chemical manufacturers of all Europe. Formation of new cartels, syndicates, conventions and creation of new trade agreements resulted in the manufacturers of England, France and Germany being bound very close together. This trend in the fine chemical field paralleled that in many fields of commercial endeavor.

It was also a year in which the government of the United States became much interested in the question of raw materials controlled by foreign owned monopolies. The Department of Commerce had laid down for itself a broad and comprehensive program of studying and policy of dealing with this problem. The Department of Justice began an investigation of its legal phases.

Comparative Values

Oil, Paint and Drug Reporter index numbers, based on 100 as the average price for thirty-five drugs and fine chemicals August 1, 1914, ranged as follows by quarters over 1927:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
173.8	173.7	173.6	173.4	189.4

Denatured Alcohol Trends

The price trend in the denatured alcohol market in 1927 was a two-phase affair. From January through March, the trend was downward for C. D. No. 5. Prices in tanks broke from 33c. per gallon to a low of 26, and it was reported that sales of distressed material had been made for substantially less than 26. The market was overstocked and at times was glutted with alcohol that found buyers with the greatest difficulty. While this situation prevailed, the fundamentals of the market were strong. Prices paid for the comparatively moderate production of blackstrap molasses resulting from curtailed sugar production in Cuba in the government scheme for improvement of the sugar industry in that island were calculated to put the alcohol market into a much stronger position eventually. Until the distressed goods were off the market, however, the improvement was wholly potential.

The improvement came suddenly in April when distillers advanced prices for denatured alcohol 8½c. per gallon. This made the price for C. D. No 5 37½c. per gallon. The market was firm to strong with virtually all distressed stocks taken up. In May this price was moved up to 40c. per gallon and the sliding scale of price advances for each month up to September was put into effect. The result was that C. D. No. 5 went to 41c. in June, 42c. in July, 43c. in August, 44c. the first of September, and finally, during that month, to 46c. per gallon. That was the top price for the year and continued to prevail for the balance of the period.

Production of denatured alcohol in the fiscal year ended June 30, 1927, totaled 100,000,000 gallons, according to a statement issued July 29 by the Commissioner of Prohibition. This was approximately 5,300,000 gallons less than was produced in the fiscal year 1925-1926, the figures for that year having been 105,375,886 gallons.

Adoption of a policy of control for alcohol production was one of the principal developments in the alcohol market late last year. Through the co-operation of alcohol producers with the Bureau of Prohibition, a plan for curtailment of alcohol production to become effective January 1, 1928, was worked out and reported from Washington November 4. The plan called for a reduction of production to 85,000,000 gallons. A feature of the affair was the guarantee of producers to buyers that the reduced output would not result in higher prices. The idea back of the plan was prevention of diversion of alcohol to illegal channels. The figure set was the estimated legitimate need of industry in 1928. It can be raised or lowered according to warranting conditions that may develop.

The plan as regards actual plant operations called for a quota for each distiller, based on percentages obtained from the proportionate production in 1927 and 1926. The government officials declared that the production cut off ranged between 10,000,000 and 15,000,000 gallons. Federal authorities said that not all of this curtailment represented alcohol that had gone to illegal use. In the industry it was felt that overproduction had been a menace to distillers for some years and that the reduced, and entirely willing, production would finally bring about a better stabilized industry with possibly less fluctuation in prices.

Ethyl alcohol passed through a year of good demand and steady prices. The year started with a cut of 55c. per proof gallon in the excise tax, which brought prices down to the basis of $3.75 per gallon for 188 proof alcohol. That remained the price for the balance of the year. In the final quarter of the period, there was a curtailment of demand due to the fact that on January 1, 1928, a second similar reduction was to be made in the excise tax. Buyers determined to hold as little $3.75 alcohol as possible at the end of the year in order to profit by purchases at $2.70½ per gallon after the turn of the year.

Synthetic Methanol Dominated

The history of methanol during 1927 is a history of the synthetic article and its successful dominance in the field for many years held by manufacturers of natural methanol. By the close of the year the sale of natural methanol, except the denaturing grade, had been about wiped out. Prices had been driven very low under the competition between the natural and synthetic article. Many export markets of importance had been lost by the makers of natural methanol to synthetic methanol made in Germany. Successful manufacture of synthetic in this country reduced the field for the sale of natural methanol. The distillers' main business became the sale of denaturing grade methanol, a business left them because the prohibition officials refused to permit synthetic methanol to be used in denaturing ethyl alcohol, the synthetic being an article of high purity and lacked the offensive smell characteristic of denaturing grade methanol.

Some idea of the fight for business made by makers of synthetic methanol and the effect of the fight on prices asked for natural methanol may be gained from the following tabulation, dates given being those of the issues of the Reporter in which price changes were reported:—

	Per gallon in tanks— Natural methanol purified.	Synthetic.
January 1	$0.85	...*
June 6	.68	$0.68
August 29	.55	.504†
October 24	.50	.495‡
December 31	.50	.495

* German synthetic available but not openly quoted.
† Domestic synthetic offered.
‡ Freight allowed to destination.

Dislodgment of natural methanol made in this country, from its previous position of dominance in world markets had been forecast when Germany, in 1925, entered the United States market with synthetic methanol that was close to 100 percent pure. In that year, 509,409 gallons were imported. Domestic exports dropped from 640,637 gallons in 1924 to 527,429 in 1925. In 1926, exports were down to 409,210 gallons. In 1927, they were down to 281,802 gallons.

The following comparison of exports of methanol by fiscal years indicates the trend of markets from the domestic wood distillation industry:—

	Gallons.
1901	919,504
1913	1,837,173
1914	1,598,776
1915	944,374
1916	1,472,258
1917	825,334
1918	2,538,001
1919	1,339,204
1920	687,008
1921	467,763
1922	737,050
1923	1,207,023
1924	640,637
1925	527,429
1926	409,210
1927	281,802

Toward the end of 1927 the makers of natural methanol began to take heart. There was some reason to believe that, regardless of the production of synthetic methanol of high purity at very low prices, there would remain a consuming market for the natural product. It was felt that the natural methanol industry had passed through the worst it was to experience from competition by the synthetic article and that the future would find actual improvement. For example, though it was known that one producer formerly prominent in the business was in financial difficulties (a receivership was ordered before the end of the year) it was reported that plans had even then been made for continued operation of the crude methanol plants of that factor. Had the trade been as distressed as it was at one time, these plants would probably have been closed down permanently.

Production of natural methanol in the first eleven months of 1927 totaled 7,194,633 gallons of crude and 4,943,185 gallons of refined. This compared with 7,362,275 gallons and 5,870,951 gallons, respectively, in the corresponding period of 1926.

Quicksilver and Mercurials Strong

The history of quicksilver and mercurials in the past year is one of ntinued and expanding strength from the beginning to the end of the twelvemonth. Due to advances in prices for the mercurial group, certain dates stand out above others as being of special significance. These dates are February 24, March 22, April 7, and October 15. On these dates calomel and blue mass—to choose two materials representative of hard and soft mercurials respectively—were advanced in price as follows:—February 24, calomel up 7c. to the basis of $1.66 per pound, but blue mass remained unchanged at 79c.; March 22, calomel up 13c. to $1.79, and blue mass up 7c. to 86c.; April 7, calomel up 17c. to $1.96, and blue mass up 11c. to 97c., and October 15, calomel up 9c. to $2.05, and blue mass up 5c. to the basis of $1.02. Over the remainder of the year calomel and blue mass remained without further change in price. Of course, throughout the entire year the entire group of mercurials changed prices parallel with calomel and blue mass; see price section for the changes made.

Naturally the course of quicksilver throughout the year was the governing factor in setting the price for mercurials. The history of quicksilver was one of continued strength: at no time was the market for metal weak or subject to a drive by short interests. As early as February, reports from abroad were to the effect that poducers of quicksilver were oversold and that higher prices were inevitable. In fact, that was the reason given for the advance in prices for hard mercurials and quicksilver on the date of February 24. On that date quicksilver was advanced $2.50 per flask. The net advance in quicksilver prices for the entire year was $28.50 per flask.

Attemnts to secure important quantities from Europe during the first quarter of the year were discouraging. So much so that when, in the third week in March, a ship sank at sea and carried 700 flasks to the bottom, the spot market for metal bounded $12.50 per flask, carrying both hard and soft mercurials up with it. Consumers were forced to buy out of the conservative spot supply following this disaster. The result was a shrinkage in supplies that on April 7 was signalized by a $5 advance in the price for metal and co-relative advances in the quotations for hard and soft mercurials.

Between that date and October 15 hard and soft mercurials were firm to strong, but unchanged as to price. Metal continued in basically strong position, with the tendency upward, but occasionally thrown into contrast with minor and unimportant recessions in the prices of sellers.

The advance in mercurials on October 15 could be traced directly to the influence of the price at which the Almaden Mines Administration sold its entire output to the Sociedad Espanola de Mercurio. The base price, according to British reports, was £17 per flask free on trucks, Almadenojos railway station. This price was £3 higher than the tender accepted in 1926.

The society promptly offered new production quicksilver at £22 per flask, f.o.b. Alicante, and within a few days the price was advanced to £22 15s. The price of £22 per flask worked out at $126.18 per flask, duty paid, New York; £22 15s. worked out at $129.83 per flask. Production at the Almaden Mines were but 2,000 flasks per month prior to the announcement of new prices. The months of major production are December, January and February, with large scale production starting in mid-October.

The contract between the Almaden Mines and the Sociedad Espanola de Mercurio calls for a 50,000 flask production for this year. The requirements of the United States alone is between 30,000 and 35,000 flasks per year, of which quantity the domestic mines are expected to furnish between 10,000, and 15,000 flasks per annum.

With the announcement of the prices for new production in Spain, a degree of stability came over the spot market. In November the market ranged $128 to $128.50, with the tendency being slightly toward the easier side. December was a month of dull demand and prices fell away slowly, first to $127 and finally to $126 in the closing week of the year.

The situation in the United States, so far as stocks were concerned, may in part be gained from a presentation of statistics covering imports and stocks in bonded warehouses at the end of each month, beginning with January and extending as far into the year as the time of publication permits. Such figures are obtained from the Department of Commerce, Washington, D. C. They are:—

	Imports— 1927. Pounds.	1926. Pounds.	Warehouse stocks, 1927. Pounds.
January	120,238	156,069	124,017
February	197,599	73,484	177,365
March	197,877	192,860	153,781
April	300,232	186,448	258,111
May	105,956	200,134	223,091
June	152,474	405,376	318,925
July	66,383	109,412	354,976
August	50,055	104,489	307,733
September	70,231	88,825	305,295
October	195,019	48,028	267,888
November	249,826	372,129	.....
December	.....	185,646	170,788

Quinine Was Quiet

Quinine passed through a year remarkably quiet for that somewhat volatile article. However, it is usually good for one feature development and it did not fail to reach prominence in 1927. Pricewise, it was a dull market at the basic quotation of 40c. per ounce for either sulphate or bisulphate. Actually, the base price was subject to the usual amount of quiet cutting under competitive circumstances.

This cutting was done through a system of sliding scale discounts, by virtue of which, it appears, seven of the largest buyers were granted a 10-percent discount—probably in addition to the usual 1-percent for cash in ten days—while another group of five was on a 5-percent basis. It also appears that in some instances several discounts were allowed before the actual price paid by the consumers was worked out. However, the discounts granted were not new developments; the number of firms and their official discount basis were.

The feature development of the year came October 27, when all factors concerned with the production, importation, and first-hand sale of quinine were served with subpoenas issued by a Federal judge of the southern district of New York at the behest of the United States attorney, acting in co-operation with a special assistant to the Attorney-General of the United States. The subpoenas called for all documents, letters, and so on, having to do with quinine matters, dating from November, 1924, forward. The documents were returnable November 4 before a grand jury. A letter went with the subpoenas, an invitation of the assistant Attorney-General of the United States for the recipients to meet with him in his Washington office October 31, at which time plans for examination of the matter called for would be made. The meeting was held but not all quinine factors were represented.

The purpose of the government in this matter was to ascertain whether the antitrust laws of the United States had been broken, particularly the act of July 2, 1890. The hearing did not start before the grand jury November 4. Apparently, by official understanding between government officers and those under subpoena, postponement was secured in order that the government might have time to study the documents held by order of the court. Subsequently, representatives of the Department of Justice went into the offices of those served there to investigate thoroughly the workings of the quinine trade in its national and international aspects. The whole thing traced back to the cinchona bark monopoly held by Holland and the control of world-wide prices for cinchona bark derivatives by reason of its ability to cut off the supply of any country not content to sell at prices dictated from Holland and to accept partition of world quinine needs on a pro rata basis according to country. At the end of the year the government investigation was still in progress.

This phase of market developments brings up a broad field of interest displayed by the Federal government in the general question of foreign monopolies of raw materials necessary to the United States. The Department of Commerce showed a major interest in the monopolies of crude iodine, bismuth metal, antimony, nickel, tin, crude rubber, and other items. The government has quietly laid down a very broad policy in this regard. The development of a policy, known in detail only to government officers, grew out of the successful operation of the Stevenson scheme in controlling production and prices for crude rubber under British agencies.

The question of raw materials also involved developments abroad in the matter of cartels, conventions, syndicates and trade agreement bodies generally. The past year was notable in that respect. The large chemical interests of Europe were bound closer together by trade agreements and understandings than ever before. Such understandings were international in character and included the principal producers of England, France and Germany.

Many conventions were erected in special products. Among them were conventions binding the makers of ep-

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som salt together and bringing the manufacturers of hydroquinone into agreement as to broad policies of production, sale and distribution of that article. The consequence in every instance of a cartel or convention being formed was a prompt advance in prices.

Tartrates Showed Strength

Crude tartar products occupied a very strong position throughout the year. Cream of tartar, Rochelle salt, and Seidlitz mixtures were all advanced substantially in price and no weakness was noted until the close of the year when a fairly satisfactory wine crop in Europe restored crude tartar stocks to something akin to normality. The cause of the advances was the shortage in crude tartar that resulted in severe enhancements of value beginning early in the year.

A poor wine crop in 1926 had resulted in underproduction of crude tartar. Prices for that article were naturally advanced and finally reached relatively high position. So difficult did it become to obtain stocks that unusual sources throughout the world —South Africa and the like—were scoured for supplies. Cream of tartar opened at 20½c. per pound in January but reached 22c. before the end of that month. In February 22½c. was done. The advance continued in March when domestic producers advanced to 23c. Early in April 23¾c. was minimum and in May the advance reached 25¾c. per pound. Prices in June started at 26¾c. and ended at 27¾c. per pound. That was the peak for the advance. The quotation continued until October, when a decline to 26¾c. took place and that figure ruled to the end of the year.

Rochelle salt opened at 20c. in January and continued thereat until April, when it went to 21c. May found the market at 22c., and in June the top point for the year was reached at 23c. The price was not changed thereafter. The climb in prices for Seidlitz mixture started in April, when quotations were raised ¾c. to the basis of 17c. per pound; the January price had been 16¼c. In May 17¾c. was reached, while in June the market was forced to 18½c. That price was the high for the year and remained unaltered over the balance of the twelvemonth period.

Codliver Oil High

Codliver oil was strong most of the year. Production in Norway was the lowest since 1923. This resulted from a decrease in the yield per liver; the number of fish caught was fair. Official production figures for the past six years follow:—

	Fish.	Oil. Barrels of 30 gls.
1927	66,800,000	63,357
1926	89,100,000	106,439
1925	60,100,000	88,118
1924	69,900,000	101,451
1923	51,600,000	54,856
1922	47,900,000	69,795

Prices in New York were high at $45 per barrel and low at $28.50. The latter price was paid in January; the former was reached in July. The advance was steady through the first six months of the year. From July forward there was a somewhat slower movement of production into consumption; the rate of decrease was larger toward the end of the year when an exceptionally open winter served to reduce consumption. In fact, it resulted in a surplus stock being held by manufacturers. They attempted to resell their surplus goods. The result was a depression in spot prices out of line with prices named abroad. Starting at $45 in July spot quotations were reduced $2 in August, a similar amount in September, an identical amount in October. That brought the market to $40 per barrel, which was asked during November. In December the pressure of surplus stocks cut prices $4 to the basis of $36.

The year in codliver oil was noteworthy also because of the concern exhibited by the Federal government in the matter of proper labeling of codliver oil. The expanding use of that article in the poultry trade and the high prices reached during the first six months of the year led to sophistication of pure codliver oil with other fish oils cheaper in price. Oftentimes such compounds were labeled "codliver oil." The government took exception and threatened legal proceedings, not because oils were mixed, but because after compounding the mixture was sold as "codliver oil." Many of the fish oils used had a very high vitamin content; there was no objection to compounding on that score, as the resulting product could well be highly useful to the poultry raiser. Mislabeling continued to be a problem for the government to handle right to the end of the year.

Menthol Market Weak

The feature of the menthol market was the fact that for many months throughout the year, the spot price for natural menthol was cheaper than replacements could be bought for in Japan. This unusual situation was in part due to the curtailed consumption in this country, a condition possible because of the fact that the larger consumers now carry a large stock of menthol to insure themselves against shortage at any time. One of them maintains a purchase office in Japan. This has reduced the amount of trading in the New York market and resulted in holders of imports becoming weak for one reason or another from time to time. When weakness came, goods were hurriedly sold at the best price obtainable.

Little suggestive of strength could be found until almost the last week of the year when one large importer became convinced that the spot stock was less than twenty-five cases. His views for the immediate future were fairly strong, and hence he bought what spot goods he could get. He did not get twenty-five cases but his purchases were made at considerably lower prices than those at which he could have bought, duty paid, in Japan.

This factor got his stronger views for the immediate future thus late in 1927 when he sold fairly substantial quantities back to Japan out of stocks owned by him on contract for shipment from the primary market. The prices obtained on this resale to primary market shippers was, in his opinion, higher than he could get for the article here had he brought it forward. These transactions reduced spot stocks, curtailed the amount of menthol certain to reach here during the first quarter of 1928, and was a strengthening element all round.

Production of menthol in Japan was expected to be ample. A large production of peppermint oil in the Hokkaido provided sufficient raw material to warrant some factors in viewing the article as moderately easy for the more remote future. Spot quotations were high for the year at $4.75 per pound in January. They were low at $3.95 in November.

Synthetic menthol continued to find much favor with certain classes of buyers. Production was ahead of last year both in this country and in foreign lands. Sales gained appreciably and to a very considerable degree there was a market for whatever might be produced. The prices obtained were fairly stable throughout the year, though naturally the trend was downward in sympathy with the decline in natural menthol.

Prices each week through the year were as follows:—

Reporter Issue		Per pound—Natural	Synthetic
January	3	$4.75	$3.75
	10	4.70	3.75
	17	4.70	3.75
	24	4.65	3.75
	31	4.50	3.75
February	7	4.40	3.75
	14	4.40	3.75
	21	4.60	3.75
	28	4.60	3.75
March	7	4.60	3.75
	14	4.60	3.75
	21	4.60	3.75
	28	4.60	3.75
April	4	4.60	3.75
	11	4.60	3.75
	18	4.45	3.75
	25	4.40	3.75
May	2	4.30	3.75
	9	4.25	3.75
	16	4.25	3.75
	23	4.25	3.25
	30	4.25	3.25
June	6	4.25	3.25
	13	4.25	3.25
	20	4.25	3.25
	27	4.25	3.25
July	4	4.30	3.25
	11	4.35	3.25
	18	4.35	3.25
	25	4.35	3.25
August	1	4.25	3.25
	8	4.25	3.25
	15	4.15	3.25
	22	4.15	3.25
	29	4.20	3.25
September	5	4.20	3.25
	12	4.15	3.25
	19	4.15	3.25
	26	4.10	3.25
October	3	4.10	3.25
	10	4.00	3.25
	17	4.00	3.25
	24	4.10	3.25
November	7	4.10	3.25
	14	4.00	3.25
	21	4.00	3.25
	28	3.95	3.25
December	5	4.05	3.25
	12	4.05	3.25
	19	4.05	3.25
	26	4.10	3.25
January	2	4.25	3.25

Narcotics Lose Stability

After more than four years of price stability, codeine and morphine were advanced in price in October, with a view of offsetting the higher cost of gum opium. The last previous price change had been made in August, 1924, when both were advanced moderately. The rise in October, last year, was acute and leading manufacturers of opium derivatives declared that when all costs of doing business are considered, the groups could both stand further advance and still keep the price to the trade down to a warranted profit.

Back of the advance in price were two outstanding conditions. First, advanced cost of opium in the Oriental markets, more especially in Smyrna, Constantinople and Salonika; second, decrease in the average percentage of morphine content per pound of opium.

Comparative figures show that November 12, 1926, the price in the primary market was 21s. 6d. per pound for 11 percent. October 4, 1927, 10¾ percent gum brought 26s. 9d. per pound. All quotations were "in bond." On both dates the spot price for gum opium was $12 to $13 per pound. When prices on codeine and morphine salts were raised October 20, opium was held without change. At the time the October, 1927, quotation was received most prices from the primary markets were for 9¾ percent material and it had been increasingly difficult to obtain offerings of higher test gum for some time back. The highest test offered came from Salonika, at which point, August 31, 1927, 34s. per pound was asked for 13¾ percent material. October 4, 14 percent was available at 35s. 6d.

The advance in codeine and morphine salts was $1 per ounce, applicable to each article within each group. Codeine alkaloid became $10.70 to $10.95 per ounce, and sulphate $8.75 to $9. Morphine sulphate was established at $8.25 to $8.45 per ounce, and alkaloid was $10.15 to $10.35.

The market was strong for the balance of the year.

Glycerin Business Changed

Glycerin refiners went through a tough year. Production and sale of ethyleneglycol to explosive manufacturers cut deeply into sales of glycerin. In some measure an idea of this reduction in consumption of glycerin may be gained from the figures covering importations of crude and refined glycerin for eleven months of the calendar years of 1927 and 1926.

	Pounds—1927 Crude.	1927 Refined.	1926 Crude.	1926 Refined.
Jan.-Nov.	14,396,865	7,581,827	26,222,505	9,914,127

Such a reduction in imports could only mean a very sharp curtailment of consumption in this country. National advertising to stimulate the use of glycerin as an anti-freeze material for use in motor car radiator compounds succeeded in some measure. In its very broadest of aspects, the glycerin market was under depression so far as total consumption, imports and prices were concerned.

Chemically pure glycerin was quoted at 30c. in January and for a part of February; toward the end of the latter month the price broke to 27c.—perhaps the severest decline during the year. By the end of March 26c. was being quoted by refiners. April prices were unchanged at 26c., but in May 25½c. was done. June prices were lowest at 25c., and July brought a quotation of 24c. During the next two months 24c. was the price in a dull market. October caught the market in a decline from 23½c. to 23c. November was sold down from 22½c. to a low of 21c. During December the highest price was 20½c., and the year ended at 20c. This made a grand reduction of 10c. in prices from the January opening to the December close.

The situation in dynamite glycerin paralleled that in chemically pure rather closely, though not exactly. The high for the year was 27c. in January, and the low was 15½c., reached in the last week of December. The midyear quotation was high at 23c. and low at 21½c. The declines were fractional most of the time and came rather regularly throughout the year. Soaplye was a weak and declining article at all times. Hardly a month but prices showed a decline of from one cent to a quarter of a cent, depending on conditions. The year opened at 18¼c. and it closed at 9¾c. Toward the end of the period there was reason to believe that any quoted price for soaplye, saponification or dynamite could have been shaded on a firm bid; in every instance asked prices were above the ideas of buyers. Stocks showed increase throughout the year and at the end were large enough to constitute a weakness that promised poorly for the early part of 1928.

Drugs, Fine Chemicals: Record of Prices

For convenience, the divisions of the mercurial and opium groups are arranged alphabetically under "Mercury" and "Opium," respectively

Acetanilide

In August, 1891, the price was 54c. to 56c.; October 17, 1891, 52c.; 1901, 10c. to 21c.; 1911, 20½c. to 23c.; 1913, 21c. to 22c.; 1918, 80c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.35	$0.35	$0.35	$0.35
February	.35	.35	.35	.35
March	.35	.35	.35	.35
April	.35	.35	.35	.35
May	.35	.35	.35	.35
June	.35	.35	.35	.35
July	.35	.35	.35	.35
August	.35	.35	.35	.35
September	.35	.35	.35	.35
October	.35	.35	.35	.35
November	.35	.35	.30	.30
December	.35	.35	.30	.30
Year	.35	.35	.35	.30

Acetphenetidin

November 14, 1910, the price was 80c. to 85c.; October 17, 1911, 82½c. to 85c.; 1913, 84c. to 85c.; 1917, February, $25.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$1.85	$1.85	$1.60	$1.60
February	1.85	1.60	1.60	1.60
March	1.60	1.60	1.60	1.60
April	1.60	1.60	1.60	1.60
May	1.60	1.60	1.60	1.60
June	1.60	1.60	1.60	1.60
July	1.60	1.60	1.60	1.60
August	1.60	1.60	1.60	1.40
September	1.60	1.60	1.40	1.40
October	1.60	1.60	1.40	1.40
November	1.60	1.60	1.40	1.40
December	1.60	1.60	1.40	1.40
Year	1.85	1.60	1.60	1.40

Alcohol

October 18, 1871, the price of ethyl was $1.87½ to $1.90; 1881, ethyl, $2.18 to $2.20; 1891, $2.30 to $2.32; 1901, ethyl, $2.51 to $2.53; wood, 95 percent, 60c.; 1911, ethyl, $2.56 to $2.58; methyl, 95 percent, 50c. to 52c.; denatured, 40c. to 42c.; 1913, ethyl, $2.50 to $2.52; methyl, 46c. to 47c.; denatured, 35c. to 38c.; ethyl, 1917, October, $5.60; methyl, 1920, $3.25; denatured, 1920, May, $1.11.

1926

	Per gallon—Ethyl 188 proof. H.	Ethyl 188 proof. L.	Methanol 95 % H.	Methanol 95 % L.	Tanks. Denatured No. 5. H.	Tanks. Denatured No. 5. L.
January	$4.85½	$4.85½	$.58	$0.58	$0.39	$0.34
February	4.85½	4.85½	.58	.58	.34	.33
March	4.85½	4.85½	.58	.55	.33	.28
April	4.85½	4.85½	.55	.55	.28	.28
May	4.85½	4.85½	.55	.55	.28	.28
June	4.85½	4.85½	.55	.55	.26½	.26½
July	4.85½	4.85½	.58	.55	.29	.26½
August	4.85½	4.85½	.70	.58	.32	.29
September	4.85½	4.85½	.70	.70	.33	.33
October	4.85½	4.85½	.75	.70	.33	.33
November	4.85½	4.85½	.80	.75	.33	.33
December	4.85½	4.85½	.60	.80	.33	.33
Year	4.85½	4.85½	.80	.55	.39	.26½

1927

	Per gallon—Ethyl 188 proof. H.	Ethyl 188 proof. L.	Methanol 95 % H.	Methanol 95 % L.	Tanks. Denatured No. 5. H.	Tanks. Denatured No. 5. L.
January	$3.75	$3.75	$0.80	$0.80	$0.33	$0.31
February	3.75	3.75	.80	.80	.31	.27
March	3.75	3.75	.80	.80	.29	.26
April	3.75	3.75	.80	.80	.37½	.37½
May	3.75	3.25	.80	.80	.40	.37½
June	3.75	3.75	.63	.63	.41	.41
July	3.75	3.75	.63	.63	.42	.42
August	3.75	3.75	.63	.50	.43	.43
September	3.75	3.75	.50	.50	.46	.44
October	3.75	3.75	.50	.45	.46	.46
November	3.75	3.75	.45	.45	.46	.46
December	3.75	3.75	.45	.45	.46	.46
Year	3.75	3.75	.80	.45	.46	.26

Twenty-three Years' Prices: Methanol 95%

	Per gallon—H.	L.
1927	$0.80	$0.45
1926	.80	.58
1925	.68	.68
1924	.88	.68
1923	1.13	.88
1922	1.13	.50
1921	1.65	.57
1920	3.25	1.52
1919	1.35	.90½
1918	1.52	1.17
1917	1.35	.90
1916	.90	.65
1915	.55	.45
1914	.45	.45
1913	.50	.45
1912	.50	.49
1911	.50	.50
1910	.50	.50
1909	.50	.50
1908	.51	.39
1907	.40	.40
1906	.70	.40
1905	.70	.60

Acetylsalicylic Acid, Powdered (Aspirin)

March 10, 1917, the price was $3.50.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.70	$0.70	$0.85	$0.85
February	.70	.70	.85	.85
March	.70	.70	.85	.85
April	.70	.70	.85	.85
May	.70	.70	.85	.85
June	.70	.70	.85	.85
July	.70	.70	.85	.85
August	.70	.70	.85	.85
September	.85	.70	.85	.85
October	.85	.85	.85	.85
November	.85	.85	.85	.85
December	.85	.85	.85	.85
Year	.85	.70	.85	.85

Bismuth Subnitrate, Powdered

May 6, 1875, the price was $2; October 18, 1881, $1.85; 1891, $1.90; 1901, $1.40 to $1.45; 1911, $1.80 to $1.85; 1913, $1.80 to $1.85; 1918, April, $6.20.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.35	$3.35	$2.70	$2.60
February	3.35	3.35	2.60	2.60
March	2.85	2.85	2.60	2.50
April	2.85	2.85	2.20	2.20
May	2.85	2.85	2.20	2.20
June	2.85	2.85	2.20	2.05
July	2.85	2.85	2.05	2.05
August	2.85	2.85	2.05	2.05
September	2.85	2.85	2.05	2.05
October	2.85	2.85	2.05	2.05
November	2.85	2.70	2.05	2.05
December	2.70	2.70	2.05	2.05
Year	3.35	2.70	2.70	2.05

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Borax, Powdered

On October 18, 1871, the price was 32c. to 33c.; 1881, 12½c. to 13¼c.; 1891, 8¾c. to 8⅞c.; 1901, 7¼c. to 7½c.; 1911, 3½c. to 3¾c.; 1913, 3¾c. to 4c.; 1920, January, 8½c.

1926

	Per pound—Sacks. H.	Sacks. L.	Barrels. H.	Barrels. L.
January	$0.04¾	$0.04¾	$0.05	$0.05
February	.04¾	.04¾	.05	.05
March	.04¾	.04¾	.05	.05
April	.04¾	.04¾	.05	.05
May	.04¾	.04¾	.05	.05
June	.04¾	.04¾	.05	.05
July	.04¾	.04¾	.05	.05
August	.04¾	.04¾	.05	.05
September	.04¾	.04¾	.05	.05
October	.04¾	.04	.05	.04¼
November	.04	.04	.04¼	.04¼
December	.04	.04	.04¼	.04¼
Year	.04¾	.04	.05	.04¼

1927

	Per pound—Sacks. H.	Sacks. L.	Barrels. H.	Barrels. L.
January	$0.04	$0.04	$0.04¼	$0.04¼
February	.04	.04	.04¼	.04¼
March	.04	.04	.04½	.04¼
April	.04	.04	.04¼	.04¼
May	.04	.04	.04¼	.04¼
June	.04	.04	.04¼	.04¼
July	.04	.04	.04¾	.04¼
August	.04	.04	.04¼	.04¼
September	.04	.04	.04¼	.04¼
October	.03¾	.03¾	.04	.04
November	.03¾	.03¾	.04	.04
December	.03¾	.03¾	.04	.04
Year	.04	.03¾	.04¼	.04

Bromine, Purified

October 18, 1871, the price was 90c.; 1885, 33c.; 1891, 17¾c. to 40c.; 1901, 48c. to 53c.; 1911, 25c. to 30c.; 1913, 30c. to 35c.; 1919, December, 85c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.47	$0.47	$0.47	$0.47
February	.47	.47	.47	.47
March	.47	.47	.47	.47
April*	.47	.47	.47	.47
May	.47	.47	.47	.45
June	.47	.47	.45	.45
July	.47	.47	.45	.45
August	.47	.47	.45	.45
September	.47	.47	.45	.45
October	.47	.47	.45	.45
November	.47	.47	.45	.45
December	.47	.47	.45	.45
Year	.47	.47	.47	.45

Bromides

June 5, 1872, the price of ammonium was $1.90 to $1.95; potassium, May 29, 1872, $1.20 to $1.30; sodium, $3.50 to $3.60; October 18, 1881, ammonium, 42c.; potassium, 29c. to 30c.; sodium, 42c.; 1891, ammonium, 36c.; potassium, 24c. to 26c.; sodium, 36c.; 1901, ammonium, 55c.; potassium, 46c. to 47c.; sodium, 51c.; 1911, ammonium, 41c. to 42c.; potassium, 31c. to 34c.; sodium, 37c. to 38c.; 1913, ammonium, 49c. to 50c.; potassium, 39c. to 40c.; sodium, 45c. to 46c.; ammonium, 1917, January, $1; potassium, 1917, November, $1.45; sodium, 1920, June, 85c.

1926

	Per pound, granular—Ammonium. H.	Ammonium. L.	Potassium. H.	Potassium. L.	Sodium. H.	Sodium. L.
January	$0.52	$0.48	$0.37	$0.36	$0.42	$0.40
February	.51	.48	.39	.38	.42	.42
March	.53	.50	.38	.38	.44	.44
April	.49½	.49	.38	.37¾	.45	.44
May	.49	.49	.38	.38	.45	.45
June	.49	.49	.38	.38	.44	.43½
July	.49	.49	.38	.38	.43½	.43½
August	.49	.49	.38	.38	.43½	.43½
September	.49	.49	.41	.38	.43½	.43½
October	.49	.48	.41	.40	.43	.43
November	.48	.48	.43	.42	.43	.43
December	.48	.48	.43	.41	.43	.42
Year	.53	.48	.43	.36	.45	.40

1927

	Per pound, granular—Ammonium. H.	Ammonium. L.	Potassium. H.	Potassium. L.	Sodium. H.	Sodium. L.
January	$0.50	$0.48	$0.42	$0.41	$0.42	$0.42
February	.51	.50	.41	.41	.42	.42
March	.51	.51	.41	.41	.42	.42
April	.51	.51	.41	.41	.42	.42
May	.51	.51	.41	.41	.42	.42
June	.48	.48	.42	.42	.42	.42
July	.48	.48	.42	.42	.42	.42
August	.48	.48	.42	.42	.42	.42
September	.48	.48	.42	.42	.42	.42
October	.48	.48	.42	.42	.42	.42
November	.48	.48	.42	.42	.42	.42
December	.48	.48	.42	.42	.42	.42
Year	.51	.48	.42	.41	.42	.42

Camphor, Monobromated

November 4, 1907, the price was $1.40 to $1.50; October 18, 1911, 95c. to $1.05; 1913, $1 to $1.10; 1919, December, $5.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$1.85	$1.85	$1.85	$1.85
February	1.85	1.85	1.85	1.85
March	1.85	1.85	1.85	1.85
April	1.85	1.85	1.85	1.85
May	1.85	1.85	1.85	1.85
June	1.85	1.85	1.85	1.85
July	1.85	1.85	1.85	1.85
August	1.85	1.85	1.85	1.85
September	1.85	1.85	1.85	1.85
October	1.85	1.85	1.85	1.85
November	1.85	1.85	1.85	1.85
December	1.85	1.85	1.85	1.85
Year	1.85	1.85	1.85	1.85

Caffeine, Alkaloid

August 20, 1894, the price was $3 to $3.10; October 18, 1901, $3.75 to $4; 1911, $3.15 to $3.25; 1913, $3.40 to $3.50; 1918, April, $13.50.

	Per ounce—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.50	$3.50	$3.25	$3.25
February	3.50	3.40	3.25	3.25
March	3.40	3.40	3.25	3.25
April	3.40	3.35	3.25	3.25
May	3.35	3.30	3.25	3.05
June	3.30	3.30	3.05	3.05
July	3.30	3.30	3.05	3.05
August	3.25	3.25	3.05	3.05
September	3.25	3.25	3.05	3.05
October	3.25	3.25	3.05	3.05
November	3.25	3.25	3.05	3.05
December	3.25	3.25	3.05	3.05
Year	3.50	3.25	3.25	3.05

Cantharides, Chinese

October, 1871, the price was $1.60; 1881, 90c. to 95c.; 1891, 95c.; 1901, 61c. to 65c.; 1911, 18c. to 20c.; 1913, 45c. to 50c.; 1920, January, $1.40.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.78	$0.78	$0.74	$0.74
February	.78	.78	.74	.74
March	.78	.78	.74	.74
April	.78	.75	.74	.74
May	.75	.75	.74	.74
June	.75	.75	.74	.74
July	.75	.75	.74	.74
August	.75	.75	.74	.74
September	.74	.74	.74	.74
October	.74	.74	.60	.60
November	.74	.74	.60	.60
December	.74	.74	.60	.60
Year	.78	.74	.74	.60

Castor Oil, Medicinal

October 18, 1871, the price was 18c. to 19c.; 1881, 14½c.; 1891, 12c.; 1901, 12c.; 1911, 10½c.; 1913, 9¾c. to 9½c.; 1918, August, 30c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.14½	$0.13½	$0.13½	$0.13
February	.13½	.13	.13½	.13½
March	.13	.13	.14	.14
April	.13	.13	.14	.14
May	.13	.12½	.13½	.13½
June	.12¼	.12½	.13	.13
July	.12½	.12	.13	.12½
August	.12	.12	.12½	.12½
September	.12	.12	.13	.12½
October	.12	.12	.13	.13
November	.12	.12	.13	.13
December	.12½	.12½	.13½	.13
Year	.14½	.12	.14	.12½

Chloral Hydrate

February 25, 1874, the price was $1.90; October 18, 1881, $1.35 to $1.80; 1891, $1.05 to $1.15; 1901, 95c. to $1; 1911, 74c. to 76c.; 1913, 61c. to 64c.; 1918, April, $2.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.60	$0.60	$0.60
February	.60	.60	.60	.60
March	.60	.60	.75	.60
April	.60	.60	.75	.75
May	.60	.60	.75	.75
June	.60	.60	.75	.75
July	.60	.60	.75	.75
August	.60	.60	.75	.75
September	.60	.60	.75	.75
October	.60	.60	.75	.75
November	.60	.60	.75	.75
December	.60	.60	.75	.75
Year	.60	.60	.75	.60

Chloroform, U.S.P.

February 25, 1874, the price was $1.65; October 18, 1881, 65c.; 1891, 50c. to 55c.; 1901, 45c. to 55c.; 1911, 25c. to 33c.; 1913, 25c. to 30c.; 1917, November, 70c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.30	$0.30	$0.30	$0.30
February	.30	.30	.30	.30
March	.30	.30	.30	.30
April	.30	.30	.30	.30
May	.30	.30	.30	.30
June	.30	.30	.30	.30
July	.30	.30	.30	.30
August	.30	.30	.30	.30
September	.30	.30	.30	.30
October	.30	.30	.30	.30
November	.30	.30	.30	.30
December	.30	.30	.30	.30
Year	.30	.30	.30	.30

Citrate, Potash

May 29, 1872, the price was $1 to $1.05; October 18, 1881, 60c.; 1891, 50c.; 1901, 33c.; 1911, 38c.; 1913, 48c.; 1919, January, $2.02.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.60	$0.53	$0.53
February	.60	.60	.53	.53
March	.60	.60	.53	.53
April	.60	.60	.53	.53
May	.53	.53	.53	.53
June	.53	.53	.53	.53
July	.53	.53	.53	.53
August	.53	.53	.53	.53
September	.53	.53	.53	.53
October	.53	.53	.53	.53
November	.53	.53	.53	.53
December	.53	.53	.53	.53
Year	.60	.53	.53	.53

Cocaine Hydrochloride, Granular

August 10, 1891, the price was $6.50 to $7; October 18, 1901, $5.50 to $5.55; 1911, $3.25 to $3.55; 1913, $3.35 to $3.60; 1918, June, $11.25.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$8.00	$8.00	$8.00	$8.00
February	8.00	8.00	8.00	8.00
March	8.00	8.00	8.00	8.00
April	8.00	8.00	8.00	8.00
May	8.00	8.00	8.00	8.00
June	8.00	8.00	8.00	8.00
July	8.00	8.00	8.00	8.00
August	8.00	8.00	8.00	8.00
September	8.00	8.00	8.00	8.00
October	8.00	8.00	8.00	8.00
November	8.00	8.00	8.50	8.00
December	8.00	8.00	8.50	8.50
Year	8.00	8.00	8.50	8.00

Cocoa Butter

April 2, 1879, the price was 37½c.; October 8, 1881, 50c.; 1891, 32c. to 42c.; 1901, 34½c. to 35½c.; 1911, 45c. to 48c.; 1913, 36c. to 39c.; bulk, 1919, March, 52c.; fingers, 1919, September, 52c.

1926

	Per pound—Bulk H.	Bulk L.	Wrapped fingers in 12-lb. boxes. H.	Wrapped fingers in 12-lb. boxes. L.
January	$0.32	$0.29	$0.37	$0.37
February	.29	.29	.37	.37
March	.29	.29	.37	.37
April	.32	.29	.97	.37
May	.32	.32	.37	.37
June	.32	.32	.39	.37
July	.32	.32	.39	.39
August	.32	.32	.39	.39
September	.37	.32	.39	.39
October	.37	.33	.39	.39
November	.33	.33	.39	.39
December	.33	.33	.39	.39
Year	.37	.29	.39	.37

1927

	Per pound—Bulk H.	Bulk L.	Wrapped fingers in 12-lb. boxes. H.	Wrapped fingers in 12-lb. boxes. L.
January	$0.43½	$0.33	$0.50	$0.40
February	.44	.43½	.50	.49
March	.43½	.43½	.49	.49
April	.43½	.43½	.50	.49
May	.43½	.42	.50	.49
June	.42	.42	.49	.47
July	.42	.42	.49	.47
August	.44	.42	.50	.49
September	.44	.44	.50	.50
October	.44	.42	.50	.48
November	.40	.40	.48	.48
December	.40	.40	.48	.48
Year	.44	.83	.50	.48

Codliver Oil, Norwegian

In September, 1872, the price was $60; October 18, 1881, $36 to $45; 1891, $23.50 to $32; 1901, $21.50 to $25; 1911, $35 to $37; 1913, $24.50 to $25; 1916, April, $150.

	Per barrel—1926. H.	1926. L.	1927. H.	1927. L.
January	$38.50	$36.50	$29.00	$28.50
February	35.00	34.00	29.00	29.00
March	32.50	32.50	29.00	29.00
April	31.50	29.00	31.50	29.00
May	28.00	27.00	45.00	35.00
June	27.00	26.50	44.50	43.00
July	26.50	26.00	45.00	44.00
August	26.50	26.00	44.00	43.00
September	26.50	26.00	44.00	42.00
October	27.00	26.50	42.00	40.00
November	30.00	27.00	40.00	40.00
December	30.00	28.50	40.00	36.00
Year	38.50	26.00	45.00	28.50

Corn Syrup, 42 Degrees

February 25, 1874, the price was $9; October 18, 1881, $4 to $4.75; 1891, $2.90 to $3.25; 1901, $1.65; 1911, $2.33; 1913, $2.31; 1917, August, $6.39.

	Per 100 pounds—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.11	$3.11	$3.31	$3.31
February	3.21	3.11	3.31	3.31
March	3.21	3.21	3.31	3.31
April	3.21	3.21	3.31	3.31
May	3.21	3.21	3.31	3.31
June	3.21	3.21	3.31	3.31
July	3.31	3.21	3.31	3.31
August	3.31	3.31	3.31	3.31
September	3.31	3.31	3.31	3.31
October	3.31	3.31	3.31	3.16
November	3.31	3.31	3.16	3.16
December	3.31	3.31	3.16	3.16
Year	3.31	3.11	3.31	3.16

Coumarin

August 20, 1894, the price was $17 to $25; October 18, 1901, $4.40 to $4.50; 1911, $3.10 to $3.25; 1913, $3.10 to $3.24; 1918, June, $32.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.10	$3.10	$3.60	$3.60
February	3.10	2.95	3.60	3.60
March	2.95	2.95	3.60	3.60
April	2.95	2.85	3.60	3.60
May	2.85	2.50	3.60	3.60
June	2.50	2.50	3.60	3.60
July	2.50	2.50	3.60	3.60
August	2.50	2.50	3.60	3.60
September	3.60	2.50	3.60	3.60
October	3.60	3.60	3.60	3.60
November	3.60	3.60	3.60	3.60
December	3.60	3.60	3.60	3.60
Year	3.60	2.50	3.60	3.60

Cream of Tartar, Powder

October 18, 1871, the price was 30½c.; 1881, 32c. to 33c.; 1891, 23c. to 23½c.; 1901, 9c. to 9¾c.; 1911, 23¾c. to 24c.; 1913, 24¾c. to 25c.; 1918, July, 68½c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.21	$0.21	$0.22	$0.20½
February	.21	.21	.22½	.22
March	.21	.21	.23	.22½
April	.21	.21	.23¾	.23¾
May	.21	.21	.25¾	.23¾
June	.21	.21	.27¾	.26¾
July	.21	.21	.27¾	.27¾
August	.21	.21	.27¾	.27¾
September	.21	.21	.27¾	.27¾
October	.21	.21	.27¾	.26¾
November	.21	.20½	.26¾	.26¾
December	.20½	.20½	.26¾	.26¾
Year	.21	.20½	.27¾	.20½

Epsom Salt, U.S.P.

October 18, 1871, the price was $3; 1881, $1.50; 1891, $1.10; 1901, $1.25; 1911, 90c.; 1913, $1.50; 1917, June, $4.37½.

	Per 100 pounds—1926. H.	1926. L.	1927. H.	1927. L.
January	$1.65	$1.65	$1.90	$1.90
February	1.65	1.65	1.90	1.90
March	1.65	1.65	1.90	1.90
April	1.85	1.85	1.90	1.90
May	1.85	1.85	1.90	1.90
June	1.90	1.85	1.90	1.90
July	1.90	1.90	1.90	1.90
August	1.90	1.90	1.90	1.90
September	1.90	1.90	1.90	1.90
October	1.90	1.90	1.90	1.90
November	1.90	1.90	2.15	1.90
December	2.00	1.90	2.15	2.15
Year	2.00	1.65	2.15	1.90

Formaldehyde

April 11, 1898, the price was 19c. to 20c.; October 18, 1901, 16c. to 17c.; 1911, 8½c. to 9½c.; 1913, 8½c. to 9½c.; 1920, March, 85c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.09	$0.09	$0.11¼	$0.11¼
February	.09	.09	.11¼	.11¼
March	.09	.09	.11¼	.11¼
April	.09	.09	.11¼	.11¼
May	.09	.09	.11¼	.11¼
June	.09	.09	.11¼	.09½
July	.09	.09	.11¼	.09½
August	.10¼	.09	.09½	.09½
September	.10¼	.10¼	.09½	.09½
October	.10¾	.10¼	.08½	.08½
November	.10¾	.10¾	.08½	.08½
December	.11¼	.11¼	.08½	.08½
Year	.11¼	.09	.11¼	.08½

Glycerin, C. P.

May 20, 1872, the price was 58c. to 80c.; October 18, 1881, 36c. to 65c.; 1891, 15c. to 18c.; 1901, 14½c. to 14¾c.; 1911, 20c.; 1913, 21c.; 1917, October, 70c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.25	$0.25	$0.30	$0.30
February	.25	.25	.30	.27
March	.24	.23½	.27	.26
April	.24	.23½	.26	.26
May	.25	.23½	.26	.25½
June	.29	.27	.25½	.25
July	.31	.30	.24½	.24
August	.31	.30	.24	.24
September	.30	.30	.24	.24
October	.30	.30	.23½	.23
November	.30	.30	.22½	.21
December	.30	.30	.20½	.20
Year	.31	.23	.30	.20

Sixteen Years' Prices

	Per pound—H.	L.
1927	$0.30	$0.20
1926	.30	.23
1925	.25	.19
1924	.19	.16½
1923	.18½	.16
1922	.18½	.14¾
1921	.20	.14
1920	.28½	.20
1919	.24	.20
1918	.68	.52
1917	.70	.52
1916	.60	.36½
1915	.65	.19¾
1914	.27	.19¾
1913	.21	.18¾
1912	.20	.16

Glycerin, Dynamite

December 30, 1895, the price was 14¾c. to 15c.; October 18, 1901, 13c. to 13¼c.; 1911, 16¼c. to 16½c.; 1913, 19¾c. to 20c.; 1917, October, 70c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.25	$0.23½	$0.27	$0.25½
February	.25	.22	.25½	.24
March	.22	.21	.24	.22½
April	.22¼	.21½	.24	.22½
May	.25	.22	.24	.23½
June	.27	.26	.23	.21½
July	.29	.28	.21½	.21
August	.27½	.26½	.21	.20½
September	.27	.27	.20½	.19¾
October	.27	.27	.19¼	.18
November	.27	.27	.17	.16
December	.28	.27	.16	.15½
Year	.29	.21	.27	.15½

Glycerin, Soaplye

August 1, 1904, the price was 9¼c. to 9¾c.; October 18, 1911, 12½c. to 13c.; 1913, 14½c. to 14½c.; 1917, October, 51c.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$0.16	$0.15½	$0.18¾	$0.17½
February	.14¾	.14	.17½	.17
March	.14⅝	.13	.17	.16
April	.15	.14¾	.16¾	.16
May	.17	.15	.16⅝	.16
June	.18½	.17¾	.15½	.14½
July	.20	.19	.14½	.13⅝
August	.18½	.17	.13¾	.13¼
September	.18	.17½	.13½	.13⅛
October	.18½	.17½	.12¾	.11⅝
November	.18⅝	.18	.11	.10
December	.18⅝	.18¼	.10	.09⅜
Year	.20	.13	.18¾	.09¾

Haarlem Oil, Domestic

May 29, 1872, the price of foreign oil was $3.50 to $3.60; October 18, 1901, foreign, $2 to $2.10; 1911, foreign, $1.85 to $2; 1913, foreign, $2; 1918, domestic, $8.50.

	Per gross bottles—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.20	$3.15	$3.25	$3.15
February	3.20	3.20	3.25	3.25
March	3.20	3.20	3.25	3.25
April	3.20	3.20	3.25	3.25
May	3.05	3.05	3.25	3.25
June	3.05	3.05	3.25	3.25
July	3.05	3.05	3.25	3.25
August	3.05	3.00	3.25	3.25
September	3.15	3.00	3.25	3.25
October	3.15	3.15	3.25	3.25
November	3.15	3.15	3.25	3.25
December	3.15	3.15	3.25	3.25
Year	3.20	3.00	3.25	3.15

Hypophosphites

August 20, 1894, the price of lime potash and soda was $1.02½ to $1.10; October 18, 1901, lime, 58c. to 70c.; potash, 58c. to 70c.; soda, 58c. to 70c.; 1911, lime, 60c. to 64c.; potash, 65c. to 69c.; soda, 65c. to 69c.; 1913, lime, 54c. to 58c.; potash, 59c. to 63c.; soda, 59c. to 63c.; 1918, lime, August, $1; potash, 1917, August, $2.15¼; soda, 1917, $1.10.

1926

	Per pound—Lime. H.	Lime. L.	Potash. H.	Potash. L.	Soda. H.	Soda. L.
January	$0.60	$0.60	$0.80	$0.80	$0.70	$0.70
February	.60	.60	.80	.80	.70	.70
March	.60	.60	.80	.80	.70	.70
April	.60	.60	.80	.80	.70	.70
May	.60	.60	.80	.80	.70	.70
June	.60	.60	.80	.80	.70	.70
July	.60	.60	.80	.80	.70	.70
August	.60	.60	.80	.80	.70	.70
September	.60	.60	.80	.80	.70	.70
October	.60	.60	.80	.80	.70	.70
November	.60	.60	.80	.80	.70	.70
December	.60	.60	.80	.80	.70	.70
Year	.60	.60	.80	.80	.70	.70

1927

	Per pound—Lime. H.	Lime. L.	Potash. H.	Potash. L.	Soda. H.	Soda. L.
January	$0.60	$0.60	$0.80	$0.80	$0.70	$0.70
February	.60	.60	.80	.80	.70	.70
March	.60	.60	.80	.80	.70	.70
April	.60	.60	.80	.80	.70	.70
May	.60	.60	.80	.80	.70	.70
June	.60	.60	.80	.80	.70	.70
July	.60	.60	.80	.80	.70	.70
August	.60	.60	.80	.80	.70	.70
September	.60	.60	.80	.80	.70	.70
October	.60	.60	.80	.80	.70	.70
November	.60	.60	.80	.80	.70	.70
December	.60	.60	.80	.80	.70	.70
Year	.60	.60	.80	.80	.70	.70

Iodide, Potash

May 29, 1872, the price was $9; October 18, 1881, $2.10; 1891, $2.59 to $2.63; 1901, $2.05 to $2.10; 1911, $2.10 to $2.15; 1913, $2.95 to $3; 1917, November, $3.75.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$3.75	$3.75	$3.75	$3.65
February	3.75	3.75	3.65	3.65
March	3.75	3.75	3.65	3.65
April	3.75	3.75	3.50	3.50
May	3.75	3.75	3.50	3.50
June	3.75	3.75	3.50	3.50
July	3.75	3.75	3.50	3.50
August	3.75	3.75	3.50	3.50
September	3.75	3.75	3.50	3.50
October	3.75	3.75	3.50	3.50
November	3.75	3.75	3.50	3.50
December	3.75	3.75	3.50	3.50
Year	3.75	3.75	3.75	3.50

Iodine, Resublimed

May 29, 1872, the price was $11; October 18, 1881, $3.25; 1891, $3.30 to $3.35; 1901, $2.70 to $2.75; 1911, $2.60 to $2.65; 1913, $3.55 to $3.60; 1919, August, $4.50.

	Per pound—1926. H.	1926. L.	1927. H.	1927. L.
January	$4.65	$4.65	$4.65	$4.65
February	4.65	4.65	4.65	4.65
March	4.65	4.65	4.65	4.65
April	4.65	4.65	4.65	4.65
May	4.65	4.65	4.65	4.65
June	4.65	4.65	4.65	4.65
July	4.65	4.65	4.65	4.65
August	4.65	4.65	4.65	4.65
September	4.65	4.65	4.65	4.65
October	4.65	4.65	4.65	4.65
November	4.65	4.65	4.65	4.65
December	4.65	4.65	4.65	4.65
Year	4.65	4.65	4.65	4.65

Magnesia Carbonate, U.S.P.

May 29, 1872, the price was 29c. to 32c.; October 18, 1881, 18c. to 19c.; 1911, 5¼c. to 6¾c.; 1913, 5½c. to 6c.; 1918, April, 25c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.10½	$0.10½	$0.09½	$0.09½
February	.10½	.10½	.09½	.09½
March	.10½	.09½	.09½	.09½
April	.09½	.09½	.09½	.09½
May	.09½	.09½	.09½	.09½
June	.09½	.09½	.09½	.09½
July	.09½	.09½	.09½	.09½
August	.09½	.09½	.09½	.09½
September	.09½	.09½	.09½	.09½
October	.09½	.09½	.08½	.08½
November	.09½	.09½	.08½	.08½
December	.09½	.09½	.08½	.08½
Year	.10½	.09½	.09½	.08½

Menthol, Imported

April 23, 1884, the price was $8.50; October 18, 1891, $2.40 to $3.50; 1901, $4.25 to $4.50; 1911, $6; 1913, $4.10 to $4.25; 1920, January, $14.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$7.00	$6.00	$4.75	$4.50
February	6.00	5.75	4.60	4.40
March	5.65	5.60	4.60	4.60
April	5.65	5.85	4.60	4.40
May	5.85	4.75	4.30	4.25
June	4.75	4.85	4.25	4.25
July	4.75	4.85	4.35	4.30
August	5.00	4.75	4.25	4.15
September	5.00	4.50	4.20	4.10
October	5.00	4.75	4.10	4.00
November	4.75	4.30	4.10	3.95
December	4.75	4.60	4.25	4.05
Year	7.00	4.30	4.75	3.95

Thirty-three Years' Prices

	Per pound— H.	L.
1927	$4.75	$3.95
1926	7.00	4.30
1925	12.75	7.50
1924	14.25	10.75
1923	19.50	7.75
1922	10.50	5.25
1921	5.25	3.75
1920	14.00	4.00
1919	7.40	3.15
1918	7.40	3.15
1917	3.50	2.85
1916	3.40	2.75
1915	3.50	2.50
1914	4.75	2.35
1913	10.25	2.70
1912	14.00	6.00
1911	7.00	3.45
1910	3.45	2.05
1909	2.75	2.05
1908	2.15	1.85
1907	2.60	1.90
1906	2.90	2.15
1905	3.00	1.75
1904	6.25	2.50
1903	8.00	5.25
1902	7.00	3.80
1901	4.75	3.50
1900	3.90	2.35
1899	3.00	1.20
1898	2.60	2.00
1897	4.20	1.85
1896	4.75	2.50
1895	4.75	4.50

Mercury and Derivatives

Quicksilver (Mercury)

October 18, 1871, the price was $63; 1881, $34; 1891, $46.50 to $48; 1901, $49.88 to $51; 1911, $47.25; 1913, $40.50, 1917, February, $140.

	Per flask of 76 pounds— 1926. H.	L.	1927. H.	L.
January	$88.00	$87.00	$101.50	$100.00
February	88.50	87.50	102.50	101.50
March	89.00	88.50	115.00	102.50
April	91.50	88.00	125.00	117.00
May	93.00	91.00	125.00	122.00
June	92.00	91.00	122.00	116.00
July	91.00	90.00	122.00	120.50
August	90.00	90.00	121.00	120.00
September	94.00	90.00	120.00	120.00
October	99.00	94.00	127.00	121.50
November	90.00	90.00	128.50	128.00
December	100.00	99.00	128.00	126.00
Year	100.00	87.00	128.50	100.00

Calomel

June 5, 1872, the price was $1 to $1.35; October 18, 1881, 60c. to 95c.; 1891, 78c. to $1.10; 1901, 86c. to $1.10; 1911, 94c. to $1.10; 1913, 69c. to $1.02½; 1918, July, $2.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.45	$1.45	$1.50	$1.50
February	1.45	1.45	1.66	1.59
March	1.45	1.45	1.79	1.66
April	1.45	1.45	1.96	1.79
May	1.45	1.45	1.96	1.96
June	1.45	1.45	1.96	1.96
July	1.51	1.45	1.96	1.96
August	1.51	1.51	1.96	1.96
September	1.51	1.51	1.96	1.96
October	1.59	1.51	2.05	1.96
November	1.59	1.59	2.05	2.05
December	1.59	1.59	2.05	2.05
Year	1.59	1.45	2.05	1.59

Mercury Bisulphate

November 9, 1903, the price was 55c. to 57c.; October 18, 1911, 68c. to 70c.; 1913, 43c. to 47c.; 1918, July, $1.58.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.14	$1.14	$1.25	$1.25
February	1.14	1.14	1.30	1.25
March	1.14	1.14	1.41	1.30
April	1.14	1.14	1.56	1.41
May	1.14	1.14	1.56	1.56
June	1.14	1.14	1.56	1.56
July	1.19	1.14	1.56	1.56
August	1.19	1.19	1.56	1.56
September	1.19	1.19	1.56	1.56
October	1.25	1.19	1.63	1.56
November	1.25	1.25	1.63	1.63
December	1.25	1.25	1.63	1.63
Year	1.25	1.14	1.63	1.25

Red Precipitate

November 22, 1871, the price was $1 to $1.05; October 21, 1885, 70c.; 1891, 91c. to 94c.; 1901, 96c. to 98c.; 1911, $1.04 to $1.14; 1913, 79c. to 89c.; 1918, July, $2.19.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.56	$1.56	$1.70	$1.70
February	1.56	1.56	1.77	1.70
March	1.56	1.56	1.90	1.77
April	1.56	1.56	2.07	1.90
May	1.56	1.56	2.07	2.07
June	1.56	1.56	2.07	2.07
July	1.62	1.56	2.07	2.07
August	1.62	1.62	2.07	2.07
September	1.62	1.62	2.07	2.07
October	1.70	1.62	2.16	2.07
November	1.70	1.70	2.16	2.16
December	1.70	1.70	2.16	2.16
Year	1.70	1.56	2.16	1.70

White Precipitate

August 1, 1877, the price was 90c.; October 21, 1885, 75c.; 1891, 96c. to $1; 1901, $1.01 to $1.03; 1911, $1.00 to $1.14; 1913, 84c. to 89c.; 1918, July, $2.29.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.67	$1.67	$1.85	$1.85
February	1.67	1.67	1.85	1.85
March	1.67	1.67	1.98	1.85
April	1.67	1.67	2.15	1.98
May	1.67	1.67	2.15	2.15
June	1.67	1.67	2.15	2.15
July	1.72	1.67	2.15	2.15
August	1.72	1.72	2.15	2.15
September	1.72	1.72	2.15	2.15
October	1.85	1.72	2.24	2.15
November	1.85	1.85	2.24	2.24
December	1.85	1.85	2.24	2.24
Year	1.85	1.67	2.24	1.85

Blue Mass, U.S.P.

June 5, 1872, the price was $1 to $1.10; March 2, 1896, 33c. to 34c.; October 18, 1901, 41c. to 42c.; 1911, 46c. to 48c.; 1913, 42c. to 44c.; 1918, July, 95c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.74	$0.74	$0.79	$0.79
February	.74	.74	.79	.79
March	.74	.74	.86	.79
April	.74	.74	.97	.86
May	.74	.74	.97	.97
June	.74	.74	.97	.97
July	.74	.74	.97	.97
August	.74	.74	.97	.97
September	.74	.74	.97	.97
October	.79	.74	1.02	.97
November	.79	.79	1.02	1.02
December	.79	.79	1.02	1.02
Year	.79	.74	1.02	.79

Mercurial Ointment, 33 1/3 Percent

August 1, 1877, the price was 40c. to 50c.; October 21, 1907, 30c. to 32c.; 1911, 42c. to 44c.; 1913, 38c. to 40c.; 1918, July, 93c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.77	$0.77	$0.79	$0.79
February	.77	.77	.79	.79
March	.77	.77	.84	.79
April	.77	.77	.90	.84
May	.77	.77	.90	.90
June	.77	.77	.90	.90
July	.77	.77	.90	.90
August	.77	.77	.90	.90
September	.77	.77	.90	.90
October	.79	.77	.94	.90
November	.79	.79	.94	.94
December	.79	.79	.94	.94
Year	.79	.77	.94	.79

Mercurial Ointment, 50 Percent

October 21, 1907, the price was 40c. to 42c.; 1911, 52c. to 54c.; 1913, 48c. to 50c.; 1918, July, $1.30.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.99	$0.99	$1.04	$1.04
February	.99	.99	1.04	1.04
March	.99	.99	1.11	1.04
April	.99	.99	1.22	1.11
May	.99	.99	1.22	1.22
June	.99	.99	1.22	1.22
July	.99	.99	1.22	1.22
August	.99	.99	1.22	1.22
September	.99	.99	1.22	1.22
October	1.04	.99	1.28	1.22
November	1.04	1.04	1.28	1.28
December	1.04	1.04	1.28	1.28
Year	1.04	.99	1.28	1.04

Opium and Derivatives

Opium Gum

October 18, 1871, the price was $4; 1881, $3 to $3.12; 1891, $1.80 to $1.90; 1901, $3.12 to $3.19; 1911, $8; 1913, $5.75 to $5.90; 1917, May, $30.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$12.00	$12.00	$12.00	$12.00
February	12.00	12.00	12.00	12.00
March	12.00	12.00	12.00	12.00
April	12.00	12.00	12.00	12.00
May	12.00	12.00	12.00	12.00
June	12.00	12.00	12.00	12.00
July	12.00	12.00	12.00	12.00
August	12.00	12.00	12.00	12.00
September	12.00	12.00	12.00	12.00
October	12.00	12.00	12.00	12.00
November	12.00	12.00	12.00	12.00
December	12.00	12.00	12.00	12.00
Year	12.00	12.00	12.00	12.00

Crops and Prices Since 1870

The following table shows the opium crops and the high and low prices for cases on spot since 1870:—

Year.	Crop, cases.	Prices— H.	L.
1927	....	$12.00	$12.00
1926	3,150	12.00	12.00
1925	3,500	12.00	12.00
1924	2,560	12.00	8.00
1923	2,200	8.00	6.75
1922	1,100	6.75	5.50
1921	1,500	7.50	5.50
1920	....	7.50	6.25
1919	....	22.50	6.75
1918	....	30.00	21.50
1917	....	30.00	13.50
1916	....	13.50	10.75
1915	7,500	11.00	6.90
1914	7,500	10.00	6.00
1913	8,500	6.60	5.60
1912	6,500	8.50	6.00
1911	10,500	8.50	4.70
1910	4,800	6.00	4.80
1909	4,800	6.00	4.00
1908	4,650	5.75	4.05
1907	3,000	7.00	3.45
1906	7,500	3.50	2.72½
1905	3,700	3.30	2.72½
1904	11,200	2.95	2.62½
1903	3,200	3.50	2.70
1902	10,000	3.05	2.70
1901	5,000	3.45	3.00
1900	8,200	3.45	3.00
1899	6,400	3.37½	2.80
1898	3,000	3.75	2.70
1897	7,000	2.80	1.95
1896	3,600	2.40	1.90
1895	7,500	2.30	1.60
1894	4,500	3.25	1.85
1893	2,845	3.15	1.77½
1892	7,500	1.90	1.50
1891	7,400	2.25	1.75
1890	5,300	3.85	2.00
1889	5,500	3.40	2.82½
1888	8,700	3.87½	2.65
1887	7,800	4.60	3.25
1886	7,500	3.25	2.80
1885	7,000	3.90	3.30
1884	5,000	4.10	3.50
1883	6,500	4.12½	3.50
1882	5,500	4.50	3.87½
1881	10,000	6.25	3.90
1880	2,000	7.75	4.87½
1879	4,000	5.25	4.35
1878	5,500	4.70	4.25
1877	9,500	6.70	4.75
1876	3,280	6.60	4.75
1875	6,480	7.75	5.00
1873	3,200	7.90	5.95
1872	4,500	7.90	6.10
1874	2,300	9.00	5.00
1871	7,961	6.00	4.90
1870	4,273	9.40	5.25

Opium, Granular or Powdered

November 22, 1871, the price was $7.40 to $7.50; October 18, 1881, $5.50; 1891, $2.80 to $2.85; 1901, $4 to $4.10; 1911, $8.65 to $8.75; 1913, $7.35 to $7.40; 1917, April, $33.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$13.00	$13.00	$13.00	$13.00
February	13.00	13.00	13.00	13.00
March	13.00	13.00	13.00	13.00
April	13.00	13.00	13.00	13.00
May	13.00	13.00	13.00	13.00
June	13.00	13.00	13.00	13.00
July	13.00	13.00	13.00	13.00
August	13.00	13.00	13.00	13.00
September	13.00	13.00	13.00	13.00
October	13.00	13.00	13.00	13.00
November	13.00	13.00	13.00	13.00
December	13.00	13.00	13.00	13.00
Year	13.00	13.00	13.00	13.00

Codeine Sulphate

December 20, 1897, the price was $3.95; October 18, 1901, $4.20 to $4.50; 1911, $5.40 to $5.55; 1913, $5 to $5.15; 1917, February, $11.

	Per ounce— 1926. H.	L.	1927. H.	L.
January	$7.75	$7.75	$7.75	$7.75
February	7.75	7.75	7.75	7.75
March	7.75	7.75	7.75	7.75
April	7.75	7.75	7.75	7.75
May	7.75	7.75	7.75	7.75
June	7.75	7.75	7.75	7.75
July	7.75	7.75	7.75	7.75
August	7.75	7.75	7.75	7.75
September	7.75	7.75	8.75	7.75
October	7.75	7.75	8.75	8.75
November	7.75	7.75	8.75	8.75
December	7.75	7.75	8.75	8.75
Year	7.75	7.75	8.75	7.75

Morphine Sulphate

October 18, 1871, the price was $4.80; 1881, $3.65 to $3.75; 1891, $1.80 to $2.10; 1901, $1.70 to $1.85; 1911, $4.20 to $4.30; 1913, $1.20 to $4.30; 1917, October, $13.80.

	Per ounce— 1926. H.	L.	1927. H.	L.
January	$7.25	$7.25	$7.25	$7.25
February	7.25	7.25	7.25	7.25
March	7.25	7.25	7.25	7.25
April	7.25	7.25	7.25	7.25
May	7.25	7.25	7.25	7.25
June	7.25	7.25	7.25	7.25
July	7.25	7.25	7.25	7.25
August	7.25	7.25	7.25	7.25
September	7.25	7.25	8.25	7.25
October	7.25	7.25	8.25	8.25
November	7.25	7.25	8.25	8.25
December	7.25	7.25	8.25	8.25
Year	7.25	7.25	8.25	7.25

Potassium Permanganate, U.S.P.

October 18, 1901, the price was 9c. to 11c.; 1911, 9¾c. to 10¾c.; 1913, 9½c. to 10c.; 1917, July, $4.10.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.14½	$0.14½	$0.14½	$0.14
February	.14½	.14½	.14	.14
March	.14½	14½	.14	.14
April	.14½	.14½	.14	.14
May	.14½	.14½	.14	.14
June	.14½	.14½	.14½	.14½
July	.14½	.14½	.14½	.14½
August	.14½	.14½	.14½	.14½
September	.14½	.14½	.14½	.14½
October	.14½	.14½	.15	.15
November	.14½	.14½	.15	.15
December	.14½	.14½	.15	.15
Year	.14½	.14½	.15	.14

Quinine Sulphate, American

October 18, 1871, the price was $2.50; 1881, $1.85 to $1.90; 1891, 24c. to 25c.; 1901, 28c.; 1911, 14c.; 1913, 23c. to 28c.; 1918, May, 90c.

(Manufacturers' Prices)

	Per ounce— 1926. H.	L.	1927. H.	L.
January	$0.50	$0.50	$0.40	$0.40
February	.50	.50	.40	.40
March	.50	.50	.40	.40
April	.50	.40	.40	.40
May	.40	.40	.40	.40
June	.40	.40	.40	.40
July	.40	.40	.40	.40
August	.40	.40	.40	.40
September	.40	.40	.40	.40
October	.40	.40	.40	.40
November	.40	.40	.40	.40
December	.40	.40	.40	.40
Year	.50	.40	.40	.40

Forty-two Years' Prices

	Per ounce— H.	L.
1927	$0.40	$0.40
1926	.50	.40
1925	.50	.50
1924	.50	.50
1923	.50	.50
1922	.60	.50
1921	.70	.80
1920	.90	.70
1919	.90	.80
1918	.90	.75
1917	.75	.55
1916	.75	.50
1915	.75	.26
1914	.41	.26
1913	.26	.19½
1912	.19½	.14
1911	.14	.14
1910	.14	.14
1909	.15	.14
1908	.16	.15
1907	.22	.16
1906	.19	.14½
1905	.23	.19
1904	.27	.21
1903	.28	.23
1902	.28	.20
1901	.34	.27
1900	.37	.29
1899	.40	.21
1898	.25	.18
1897	.30	.15
1896	.27	.17½
1895	.28	.25
1894	.27½	.25½
1893	.25	.20
1892	.24	.20
1891	.30	.24
1890	.37	.32
1889	.40	.32
1888	.49	.40
1887	.61	.35
1886	.73	.49

Note.—Prices for bulk quinine salts based on sulphate for the years cited.

Rochelle Salt

October 18, 1881, the price was 25c.; 1891, 25c.; 1901, 16½c. to 17½c.; 1911, 19c. to 19½c.; 1913, 18c. to 18½c.; 1918, August, 46½c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.20	$0.20	$0.20	$0.20
February	.20	.20	.20	.20
March	.20	.20	.20	.20
April	.20	.20	.21	.21
May	.20	.20	.22	.21
June	.20	.20	.23	.22
July	.20	.20	.23	.23
August	.20	.20	.23	.23
September	.20	.20	.23	.23
October	.20	.20	.23	.23
November	.20	.20	.23	.23
December	.20	.20	.23	.23
Year	.20	.20	.23	.20

Saccharin, Soluble

December 11, 1905, the price was $1.50 to $1.75; October 18, 1911, $1.25 to $1.50; 1913, $1.25 to $1.50; 1917, August, $42.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.75	$1.75	$1.75	$1.75
February	1.75	1.75	1.75	1.75
March	1.75	1.75	1.75	1.75
April	1.75	1.75	1.75	1.75
May	1.75	1.75	1.75	1.75
June	1.75	1.75	1.75	1.75
July	1.75	1.75	1.75	1.75
August	1.75	1.75	1.75	1.75
September	1.75	1.75	1.75	1.75
October	1.75	1.75	1.75	1.75
November	1.75	1.75	1.75	1.75
December	1.75	1.75	1.75	1.75
Year	1.75	1.75	1.75	1.75

Salol

August 20, 1894, the price was $3.05 to $3.10; October 18, 1901, $1.25 to $1.50; 1911, 85c. to 90c.; 1913, 55c. to 57½c.; 1917, January, $2.50

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.80	$0.80	$0.90	$0.90
February	.80	.80	.90	.90
March	.80	.80	.90	.90
April	.80	.80	.90	.90
May	.80	.80	.90	.90
June	.80	.80	.90	.90
July	.80	.80	.90	.90
August	.80	.80	.90	.90
September	.90	.80	.90	.90
October	.90	.90	.90	.90
November	.90	.90	.90	.90
December	.90	.90	.90	.90
Year	.90	.80	.90	.90

Santonin, Crystals

May 29, 1872, the price was $11 to $12; October 18, 1901, $5.25 to $5.50; 1911, $14.40 to $14.65; 1913, $26 to $26.50; 1920, May, $175.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$130.00	$130.00	$130.00	$130.00
February	130.00	130.00	130.00	130.00
March	130.00	130.00	130.00	130.00
April	130.00	130.00	130.00	130.00
May	130.00	130.00	130.00	130.00
June	130.00	130.00	130.00	130.00
July	130.00	130.00	130.00	130.00
August	130.00	130.00	130.00	130.00
September	130.00	130.00	130.00	130.00
October	130.00	130.00	130.00	130.00
November	130.00	130.00	130.00	130.00
December	130.00	130.00	130.00	130.00
Year	130.00	130.00	130.00	130.00

Seidlitz Mixture

July 14, 1875, the price was 27c. to 28c.; October 18, 1881, 23c.; 1891, 20c.; 1901, 13½c. to 14½c.; 1911, 15½c. to 16c.; 1913, 14½c. to 15c.; 1918, August, 36c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.16¼	$0.16¼	$0.16¼	$0.16¼
February	.16¼	.16¼	.16¼	.16¼
March	.16¼	.16¼	.16¼	.16¼
April	.16¼	.16¼	.17	.17
May	.16¼	.16¼	.17	.17¼
June	.16¼	.16¼	.18½	.17¼
July	.16¼	.16¼	.18½	.18½
August	.16¼	.16¼	.18½	.18½
September	.16¼	.16¼	.18½	.18½
October	.16¼	.16¼	.18½	.18½
November	.16¼	.16¼	.18½	.18½
December	.16¼	.16¼	.18½	.18½
Year	.16¼	.16¼	.18½	.16¼

Sodium Benzoate

On October 18, 1901, the price was 44c. to 46c.; 1911, 26c. to 28c.; 1913, 23¾c. to 24c.; 1917, January, $8.75.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.50	$0.50	$0.50	$0.50
February	.50	.50	.50	.50
March	.50	.50	.50	.50
April	.50	.50	.50	.50
May	.50	.50	.50	.50
June	.50	.50	.50	.50
July	.50	.50	.50	.50
August	.50	.50	.50	.50
September	.50	.50	.50	.50
October	.50	.50	.50	.50
November	.50	.50	.50	.50
December	.50	.50	.50	.50
Year	.50	.50	.50	.50

Strychnine Alkaloid, Crystals

May 29, 1872, the price was $2.75 to $3; October 18, 1901, $1.05 to $1.15; 1901, 55c. to 80c.; 1911, 55c. to 60c.; 1913, 50c. to 60c.; 1920, April, $1.95.

Per ounce

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.61	$0.61	$0.56	$0.56
February	.61	.61	.56	.56
March	.61	.61	.56	.56
April	.61	.61	.56	.56
May	.61	.61	.56	.56
June	.61	.61	.56	.56
July	.56	.56	.56	.56
August	.56	.56	.56	.56
September	.56	.56	.56	.56
October	.56	.56	.56	.56
November	.56	.56	.56	.56
December	.56	.56	.56	.56
Year	.61	.56	.56	.56

Sugar of Milk

May 29, 1872, the price was 40c. to 50c.; October 18, 1881, 28c. to 31c.; 1891, 26c. to 28c.; 1901, 13c. to 16c.; 1911, 15c. to 20c.; 1913, 16c. to 17c.; 1919, January, 60c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.21	$0.21	$0.21	$0.21
February	.21	.21	.21	.21
March	.21	.21	.21	.21
April	.21	.21	.21	.21
May	.21	.21	.21	.21
June	.21	.21	.21	.21
July	.21	.21	.21	.21
August	.21	.21	.21	.21
September	.21	.21	.21	.21
October	.21	.21	.21	.21
November	.21	.21	.21	.21
December	.21	.21	.21	.21
Year	.21	.21	.21	.21

Tartar Emetic, Technical, Crystals

May 29, 1872, the price was $1; October 18, 1911, 23¼c. to 25c.; 1913, 22½c. to 23c.; 1917, November, 67c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.29	$0.29	$0.29	$0.29
February	.29	.29	.29	.29
March	.29	.29	.29	.29
April	.29	.29	.29	.29
May	.29	.29	.30¾	.29
June	.29	.29	.30¾	.30¾
July	.29	.29	.30¾	.30¾
August	.29	.29	.30¾	.30¾
September	.29	.29	.30¾	.30¾
October	.29	.29	.30¾	.30¾
November	.29	.29	.30¾	.30¾
December	.29	.29	.30¾	.30¾
Year	.29	.29	.30¾	.29

Thymol

January 20, 1896, the price was $2; October 18, 1901, $3.15 to $3.25; 1911, $1.25 to $1.35; 1913, $1.65 to $1.70; 1917, November, $17.50.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$4.25	$4.15	$2.75	$2.70
February	4.00	3.75	2.95	2.70
March	3.75	3.60	2.95	2.95
April	3.60	3.60	2.95	2.95
May	3.75	3.50	2.95	2.75
June	3.50	3.50	2.75	2.75
July	3.50	3.40	2.75	2.75
August	3.40	3.40	2.70	2.70
September	3.40	3.40	2.65	2.65
October	3.40	3.15	2.65	2.65
November	3.25	2.85	2.65	2.60
December	2.75	2.75	2.60	2.60
Year	4.25	2.75	2.95	2.60

Vanillin

October 19, 1890, the price was $3.75 to $4; 1901, 70c. to $1; 1911, 33c. to 36c.; 1913, 33c. to 36c.; 1918, August, 90c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
*January	$0.47	$0.47	$7.20	$7.20
*February	.47	.45	7.20	7.20
*March	.45	.45	7.20	7.20
*April	.45	.45	7.20	7.20
*May	.45	.44	7.20	7.20
†June	7.20	7.20	7.20	7.20
July	7.20	7.20	7.20	7.20
August	7.20	7.20	7.20	7.20
September	7.20	7.20	7.20	6.75
October	7.20	7.20	6.75	6.75
November	7.20	7.20	6.75	6.75
December	7.20	7.20	6.75	6.75
Year	7.52	7.20	7.20	6.75

* Per ounce.

Italian Citrus By-Product Industry

By Miles Hammond, Assistant Trade Commissioner at Rome

(Loaned by Perishable Products Section, Foodstuffs Division, Bureau of Foreign and Domestic Commerce)

Citrus by-product production depends for its extent largely upon the supply and demand of lemons, oranges and mandarins.

Although this is an elementary axiom of economics, nevertheless it is thought well worth stressing here, inasmuch as the by-product industry is not entirely self-sustaining, but depends on the fortunes of Italian citrus fruit. Citrus by-products offer to an extent an overproduction or underconsumption escape for the Italian citrus grower. Added to supply and demand is the important consideration of quality, much fruit which would not sell in foreign markets finding an outlet in the by-product industry.

As an illustration, to show the extent of the problems which confront the essential oil industry, the influence of weather in consuming markets is cited as a notable factor. Exporters have been complaining that an unseasonable and rainy summer in northern Europe this year cut heavily into the consumption of soft drinks, and consequently of citrus flavoring extracts. The limited requirements were met principally from goods held in Messina depots and consignments abroad. One lemon oil exporter wrote:—"As a consequence (northern Europe weather) local activity has been restricted, the prevailing tone being dull, and business has been of a lifeless nature." Stocks of lemon oil on hand have been placed at 200,000 pounds.

Camera Agrumaria

Factors mentioned above enter into the activities of the Camera Agrumaria, which controls to a large extent the citrus by-product market in Italy.

The history and future of the "Camera Agrumaria per la Sicilia e la Calabria in Messina" (which may be freely translated as "Sicilian and Calabrian Citrus By-Product Defense Council in Messina") is somewhat checkered. Because of haphazard marketing of citrate of lime and concentrated lemon juice, prices having been low with losses to manufacturers and growers alike during years of high production and years of large stocks, and prices having been high during years of low production and low stocks, the Citrus By-Product Defense Council above referred to was instituted by law July 5, 1908, to promote and advance the citrus by-product industry. Manufacturers and holders of citrate of lime and concentrated lemon juice were required by law to deposit their products at the council's warehouses, to be sold for their account at a predetermined sale price.

The Great War period placed a heavy strain on the council. Because of lack of transportation and the closing of European markets, a crisis faced the Italian citrus industry. Transformation of heavy surplus lemon stocks into citrate of lime and concentrated juice was seized upon as a solution. Consequently, stocks accumulated. During the 1917-1918 season the price was fixed at 433 lire the quintal*, an arbitrary figure. As lemon exportation decreased, transformation into citrate of lime and concentrated juice increased. Whereas in 1914 lemon exports amounted to 3,083,890 quintals, in 1917 they were 1,509,761 and in 1918 they were 911,692 quintals.

So important did the Germans consider the citrus by-product industry as a harbor of refuge for Italy's surplus citrus fruit that the Fabbrica Chimica Arenella (Arenella Chemical Works) at Palermo, the largest plant of the kind in the world, was shelled by a German submarine.

The 1918-1919 season found the price of citrate fixed at 700 lire a quintal. Because of these artificially high prices export of citrate of lime, which in 1916-1917 was 74,747 quintals, fell off in 1917-1918 to 52,570 quintals. At the end of July, 1919, stocks of citrate of lime were reported to be 153,604 quintals.

During the war years, 1914-1918, and the year immediately following, 1919, the average yearly production of citrate of lime rose from 54,810 to 86,789 quintals. At the end of the 1920-1921 season stocks of citrate of lime were 201,800 quintals.

However, with the return of export conditions more nearly approaching normal, stocks were reduced, being 154,450 quintals in 1921-1922, rising, nevertheless, in 1922-1923 to 183,311 quintals. The debt of the council, due to advances to sellers, amounted in the 1921-1922 season to 76,230,284 lire, and at the end of the season 1922-1923 to 83,218,983 lire.

Methods of Paying Depositors

According to the law of 1908 instituting the council, it was obligated to pay producers in advance two-thirds of the set selling price, upon receipt of the deposited citrate of lime or concentrated citric acid. The law of 1910 raised this payment from two-thirds to three-quarters, but further provided that the entire minimum price set should be paid to little producers and to co-operative societies. This encompassed virtually all producers.

The decree of October 23, 1917, changed this to a fixed payment to depositors of 85 percent of the minimum buying price, the difference between the buying and the selling price to go toward amortizing the value of deposited goods unsold, calculated at the advance price, and any remaining portion to go to the depositors. The drawback to this plan was that depositors agitated to influence the government to pay a high price for their product. Production was in direct proportion to the price fixed, sales being in indirect proportion.

Corrective Measures

The Fascist government showed a strong hand in an endeavor to untangle the affairs of the council. The royal decree of October 15, 1923, provided as follows:—"The council will receive citrate of lime and concentrated lemon juice at its depots in the exclusive interest of and for the account of the depositors." In this way owners became partners with the council in the selling enterprise, whereas formerly their interests conflicted as they occupied the opposing positions of buyer and seller.

Instead of advance payments, deposit warrants were issued as payment pledges. In chronological order of deposit the council would pay three-quarters of the selling price fixed annually in advance by the Ministry of Finance in conformity with the estimated production and demand. The council's debt owed the government (through banking institutes of issue) must be paid in fifteen years at the rate of one-fifteenth each year, including interest. The annual payment on this debt was to be 7,500,000 lire, to be paid out of sales made from stocks left over from past years. If this was not sufficient, the payment was to be made out of the one-quarter remaining after the three-quarters of the selling price had been set aside for the proprietors.

The law of December 2, 1923, further modified the above-cited law, by giving freedom to the council from the necessity of the obligation to receive deposits of concentrated lemon juice, but gave it the right to collect on exports of this product by private persons, a tax determined annually by the Ministry of Economy in concert with the Ministry of Finance; this tax to be in proportion to the average price on a quantity of citrate of lime, corresponding to the amount of concentrated lemon juice sold directly. An export tax on concentrated lemon juice of 120 lire per 100 kilos has been set, such export being made under license of the council. The royal decree of December 16, 1926, refixed the amount to be paid on deposit warrants at four-fifths of the selling price.

Due to the success of the later legislation cited in the above paragraph, the debt of the council has been reduced from 83,218,983 lire in 1922-1923, to 35,266,180 lire in 1925-1926, with an estimated debt at the end of the current season. 1. e., on November 30, 1927, of 30,000,000 lire.

Present Condition of the Council

The council is reported to have received during the 1926-1927 season, 4,900 tons of citrate of lime, as compared to 4,978 tons during 1925-1926. These stocks are delivered to council warehouses located at Messina, Catania, Riposto, Palermo, Siracusa, and Reggio Calabria.

Officials of the council announced verbally its stock of citrate of lime as of June 15, 1927, had been reduced to 13,000 tons, 4,886 tons of which had been received during the 1926-1927 season. Of the stock on hand, 3,200 tons had been sold but undelivered, while 2,600 tons represented its 1926-1927 delivered sales up to that date. Officials estimated 1,500 tons would be sold during the rest of the season, which ends November 30, 1927, and that its balance of stock on hand would be 8,000 tons at that time. The official figures published by the council as of June 30, 1927, and July 30, 1927, are as follows:—

	June 30 (Tons)	July 30 (Tons)
Entries for month	134.891	200.507*
Season entries cumulative	4,732.756	4,993.263
Withdrawals for month	531.281	594.542†
Withdrawals cumulative	2,966.036	3,560.578
Stocks at end of month	12,724.127	12,330.092

* "Corrected" figure of entries for month obtained by subtracting cumulative entries of previous month from the July cumulative total. The published figure for July entries was 200.507.

† "Corrected" figures obtained by subtracting published cumulative withdrawal figure of previous month from cumulative withdrawal figure for the current month. The month of June published withdrawal figure was 527.466 tons; that for July, 593.267 tons.

A prominent member of the Messina trade avers that unofficial information is to the effect that August entries amounted to 68 tons, though this figure is subject to change. It is estimated that from 220 to 230 tons have been produced by local citric acid factories for their own use between December 1, 1926, and August 31, 1927.

Officials of the council estimated that stocks on hand on November 30, 1927, which date marks the end of the 1926-1927 season, would amount to 8,000 tons. Valuing this at 600 lire a quintal (220.5 pounds), the official selling price, the council has a liquid asset in this stock of 48,000,000 lire. Its fiscal debt to the official issuing banks has already been estimated to amount, as of November 30, 1927, to 30,000,000 lire, as compared to its debt of 83,218,983 lire for the 1922-1923 campaign. The financial condition of the council from these reports would seem, therefore, to be very much improved.

To the above-mentioned assets should be added the export duties received by the shipment of concentrated lemon juice by exporters under council license. During the 1925-1926 season, it is estimated 1,000 tons of this product were exported, bringing to the council a monetary return of 1,200,000 lire, the export tax being 120 lire per quintal of 100 kilos. This season the amount of concentrated lemon juice exported is expected to amount to 600 tons, namely, 6,000 quintals, which, at the tax of 120 lire a quintal, would return 720,000 lire.

Basis for Estimating

Officials of the council figure by-product proportion as follows:—One thousand lemons weigh on an average 120 kilos, which will produce 4 kilos of citrate of lime and 0.4536 kilo of lemon oil. A prominent member of the trade varies the above by using 3.824 kilos instead of 4. An English chemist in Messina gives the following as a rough English working variable of the above weights:—Two hundredweight of lemons gives 10 pounds (English) of citrate of lime and one pound (English) of lemon oil. These proportions will vary according to the season and quality of the fruit, but they are employed in arriving at estimates, as, for example, if one has the amount of citrate of lime produced, or sold, etc., one may figure out an approximation of the amount of lemons involved. That is, having one variable, one may figure out the others.

Future Prospects

Although lemon exporters estimate the coming winter lemon crop at from 15 to 25 percent above that of last year, the fruit is said to be rather small, with picking delayed, as the result of drought. The Italian Government's "provisional summary" of production for 1926 gives Insular Italy a lemon production of 482,966 short tons. Consul Edward I. Nathan at Palermo has announced picking of the winter lemon crop was not expected to start until the end of October, instead of the beginning of that month, as formerly. Due to these factors, it has been predicted the by-product yield will be smaller than would otherwise obtain. One large shipper writes:—"Lemons this year are almost all winter fruits (first blossom), and in the event of a strong demand setting in for export in boxes within the next two or three months (letter dated October 10, 1927), only small quantities will be left for derivatives."

Another important Messina dealer reports demand for box fruits for December shipment active and therefore, despite a predicted 25 percent increase in this winter's crop over that of last year, "the increase of citrate of lime production over last year's may not be in the same proportion; and then there always remains the danger of frost damage, which lasts until the end of the month of March."

Added to this is the report of the council that this year's Verdelli crop met with strong demand from the interior. Consul L. G. Dawson at Messina reported increased export demand for Verdellis, shipments in August from that port totaling 69,795 cases of 89 English pounds each, as compared with 34,090 and 39,009 cases in the same months of 1926 and 1925, respectively. Total shipments or Verdellis this season from Messina were more than twice those of the 1926 and 1925 seasons, the United States being the largest buyer. The Verdelli season ended the third week in September.

In former years larger quantities of the Verdelli crop were used for by-products, but the fresh fruit demand made this year an exception, with producers reported demanding 40 lire a quintal from citrate of lime manufacturers, when the price most usually paid has been from 22 to 25 lire per quintal ex-factory.

Because of these considerations, no great amount of hope has been held out that the council will reduce the price of citrate of lime from this season's price of 600 lire per quintal.

However, a more optimistic note is sounded by an English lemon and lemon oil export house in Messina, an official of which writes:—"Rain has fallen in all parts of Sicily during the last few days, and a good crop of fruit is now to be expected." The letter was dated October 7, 1927.

Citrate of Lime Payment

The selling price for this season, having been set at 600 lire per quintal for citrate of lime, dates of payment have been set in conformity with the financial arrangements for the council's operation. On receipt of the citrate of lime at one of the council's warehouses a "fede di deposito," or deposit warrant, for four-fifths of the price set is issued to the depositor. These warrants are retired as the stock is sold, the council having exclusive charge of the sale of this product. For instance, in August of this year the council announced that the Bank of Sicily, the Bank of Naples at Reggio Calabria would honor and pay warrants issued for citrate of lime deposited from March 31 to April 10, 1927. The rest—that is, one-fifth of the price set after four-fifths has been paid the owner—is paid, according to officials of the council, at the end of the season usually, less, roughly, 3 percent as a "tassa camerale" (council tax) and 1 percent for warehousing expense and insurance. Although the selling price has been kept at 600 lire the quintal by the council this year, actually the price in foreign currencies has advanced appreciably. On November 30, 1926, when the lira was valued at 4.26 cents, a quintal of citrate of lime sold for the equivalent of $25.56. Now the same quantity at the same lire price would cost $32.76, the lira being valued at 5.46 cents. A similar situation is confronted in dealing with other foreign currencies.

Procedure in Buying

Before the would-be depositor is credited with a single lira his product is sampled and this sample is analyzed. Calculations are made on a standard basis of 64 percent citric acid. The minimum acid content is 57 percent, the council refusing to accept any stock of lower percentage. It is said to often happen that a citrate of lime delivery contains as much as 67 percent, such deliveries demonstrating the presence in the original lemon juice of high acidity and good working efficiency. The analytical report of the official chemist gives the percentage of citric acid content, excess of lime and the moisture. The percentage of moisture is an important factor, for if the delivery contains 0.5 percent it is required to be rejected, inasmuch as when citrate of lime is damp fermentation sets in and it deteriorates in grade and value.

The council's set price applies to citrate of lime of 64 percent acidity. Credit and payment are made in direct proportion to the citrate acid content—that is, if it assays more than 64 percent, a proportionate bonus is given; if less, a proportionately smaller credit and payment are allowed.

By-Product Plants

The manufacture of citrate of lime is rather widespread in Sicily, 240 comparatively small plants being reported in operation. Four large plants are Fabbrica Chimica Arenella di Palermo (Arenella Chemistry Works), reported to be the largest citric acid industry in the world; the Societa Anonima Derivati Agrumi (Citrus Fruit Derivative Company), known briefly as the SADA; Industria Siciliana Acido Citrico (Sicilian Citric Acid Industry), shortened to ISAC in trade parlance; and Citrica. These four, with the Appula di Casal Monferrato plant, are semi-officially reported to monopolize 50 percent of the citrus derivative industry.

Reports have been frequent that Fabbrica Chimica Arenella ("the largest citric acid plant in the world") has been somewhat shaky financially. Trade gossip, also, is to the effect that the intense nationalism of the Fascisti did not look kindly on the heavy interest held in this great plant by foreign capital, and that steps to "Italianize" the factory were in the offing. The German interest is said to be strong, with machines, technical methods, processes, and some officials of that nationality. As to the reported steps to bring about an amalgamation of the interets of the first four large plants mentioned above, an official of one of the largest and oldest Sicilian by-product export houses, writes:—"Owing to the low price of citric acid reached and the very poor demand from abroad, stocks accumulated, and they (the manufacturers named) have been trying to safeguard

(Continued on page 78)

* Quintal is the metric quintal (100 kilos) of 220.5 pounds; ton is the metric ton of 10 quintals.

Botanical Drugs: Market Review

Undertones in the market for botanical drugs were generally firm during 1927. The carryover from 1926 crops was moderate in size and by the end of the first quarter of the new year was down to normal volume. New production at home and abroad was moderate in size, the entire group of materials considered. There were pronounced shortages in some European botanicals of first importance to manufacturing trades. This caused several abnormal advances in prices and served to tone up the whole list of materials grown in Europe.

Sales volume in the United States was said to have increased to a satisfactory extent over that in the previous year. Competition was present most of the time, but it was rarely disproportionate to the operation of the law of supply and demand. The report at the end of each quarter was usually suggestive of a volume of business excellent in size and profitable in the main.

A strengthening element at all times was the shortages in certain European botanicals. There were only a few instances in which distressful shortage developed in domestic crude drugs. There were some instances in which an over-supply was noted in company with severe competition and steady reductions in prices.

Price changes in each quarter of 1927, 1926 and 1925 compare as follows: —

	1927.	1926.	1925.
First Quarter			
Advances	243	201	188
Reductions	230	336	215
Totals	473	537	403
Second Quarter			
Advances	161	179	170
Reductions	324	302	242
Totals	485	481	412
Third Quarter			
Advances	221	178	205
Reductions	243	258	193
Totals	464	436	398
Fourth Quarter			
Advances	219	242	253
Reductions	267	228	317
Totals	486	470	570
Whole Year			
Advances	844	800	816
Reductions	1,064	1,124	967
Totals	1,908	1,924	1,783

Comparative Values

Oil, Paint and Drug Reporter index-numbers, based on 100 as the average price for forty botanical drugs (twenty domestic and twenty foreign), August 1, 1924, ranged as follows by quarters over 1927:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
126.3	128.8	122.8	127.6	130

Balsams

Balsams passed through a year of normal price development. Para copaiba had two pronounced movements in quotations. The trend was upward from January through May, during which time quotations were advanced from a low of 44c. to a high of 57c. per pound. From May through the balance of the year the trend was downward. The market was as low as 42c., reached in October and also in November, though in the latter month prices at one time were at 45c. per pound. December found the market at 45c., with undertones rather quiet, and favoring the easier side of possible developments for the future. South American balsam followed the movement of Para rather closely. The market was high for the year at 60c. per pound, reached in April and continued through May. The low was 45c., quoted in October. A firmer undertone came in November and brought prices back to the basis of 50c. per pound. It remained at that position for the balance of the year.

Canada fir balsam began the year at $11.25 per gallon but was advanced to $12 before the end of January. That figure remained for the rest of the year. Oregon fir balsam was strong at the beginning of the year, prices opening at $1.35 per pound and going to $1.50 on good buying. In February it dropped back to $1.40, but the recession was short-lived; prices reacted and in March reached $1.60 per pound. April through September was a period of reaction. Quotations dropped from $1.60 in April to $1.15 per pound in September. Under this decline in price, competition was very keen, increasing proportionately to the expansion in stocks and the drop in replacement quotations. The low for the year was $1.15 and was current in both September and October, though the October price at one time was $1.25. An advance of sharp proportions came in November, when the market went to $1.50. It continued in December, when $1.65 per pound was done on the spot. The outlook for the new year favored a slight recession in prices when stocks should be replenished; they were very small at the close of the year.

Peru was highest for the year in the first quarter; $1.70 ruled steadily throughout that period. Quotations fell away to $1.65 in April and the market remained thereat until June, when sales were made at $1.60. The market came back to $1.65 and continued unchanged for the balance of the year.

Tolu was strongest during the last quarter of the year. The market advanced from 85c. per pound to a high of $1.25 in October, remained at $1.25 throughout November, but was back to $1 before the end of December. During the first six months, prices declined from 95c. in January to 85c. in June.

Barks

In the main, price trend in barks was upward; little weakness could be found in the group at any time. In many instances, prices at the end of the year were substantially higher in December than they had been in January. The leading materials within this group were black haw root bark, selected elm, orange peel, and soap bark.

Black haw was a firm article from January to June. It opened at 25c. and remained thereat until June when the market became 24c. Influence of new crop expectations sent prices to a low of 23c. in July; that was also low for the year. Adverse news concerning the collection of the article served to strengthen the market at midyear. By August sellers became convinced that there would be no surplus stock and that conservation of holdings then in hand would be wise. Quotations were raised from 23c. to 26c. in August, and in September 29c. was done, and confirmed in further transactions. That was the price for the rest of the year. At the end of December the future seemed to be committed to strong undertones owing to the fact that there were some requirements yet to be covered.

Cascara passed through a year of disappointing prices and consumption. Despite reports of a bullish nature issued early in the period, the tendency of prices was downward most of the time. The high for the year was 15c. in January. By the end of February 14½c. was in force and remained thereat until September when 15c. was again done. Quotations dropped to 13½c. in October and were still so quoted at the end of the year. Stocks in all markets seemed to be plentiful at all times, this accounting for the absence of more than steady undertones most of the year.

Selected elm began the year in firm position. The stocks held on spot and in the primary market were of fair size; at least they were sufficient for any reasonable need. They proved to be ample. Beginning the year at 20c., the market remained thereat until April when 21c. was established. From May through November, 21c. prevailed. Demand freshened as the year came toward an end. In December prices first went to 23c. and finally to 24c., there to end the twelvemonth period, the latter figure being high for the year. Demand during the last quarter of the year was particularly good.

Orange peel had far more than the usual swing in quotations during the past year. The trend was strongly upward due directly to absorption of spot stocks and the replacement of exhausted supplies at very high prices abroad. The market was lowest for the year in January when business was recorded at 6½c. By the end of the month it was up to 8c. February was a month of strong demand. The market was bid up from 7¾c. to 12c. per pound and throughout March 12c. was a strongly maintained price. During April and May quotations fluctuated a bit, swinging between 10c. and 11c. per pound, according to seller, demand, and quantity. In June, quotations shot up from 10c. to a basis of 13c. That price was high for the year. Replenishments were obtained in quantity shortly after midyear and prices dropped back to 10c., there to remain until November when they went still lower to 9c. December was dull at 9c. as an unchanged price. The high for the year was 13c.; the low was 6½c. The range in price change was most unusual.

Soap bark was a feature most of the year. The strongest time during the twelvemonth came in the second semester when stocks of whole bark were exhausted in Brazil, having been bought and transported by German merchants to the Hamburg market. This naturally put prices sharply to the advance and caused them to end the year strongly maintained in most quarters. Whole bark was low for the year at 9c. per pound, named in January. In February, business was done at both 9c. and 10c. In March, 10c. and 11c. was recorded in actual transactions. April was a firm month at 11c. but in May 10c. was again done. June was unchanged at 10c. July caught the market in an upward swing from a low of 10c. to a high of 12c. The market remained thereat until August when another advance of 2c. made prices 14c. They were unchanged for the balance of the year. Cut and sifted bark, the item of principal demand here, was sold at 10c. in January and that was the cheapest price named during the year. By the end of February 13½c. had been confirmed. There was but little change until July when prices became very strong at 14c. In October 16c. was reached and in December quotations topped the year at 18c. Crushed back was high for the year in September, 17c. was done. The last quarter was strong, 16c. being done then. It was low at 11c. in January. The rise in prices was very steady from February to September.

Beans

Vanilla beans were featured mostly by competition, price declines, and buying in small units throughout the entire year. Importations were somewhat behind those in the previous year, a fact indicative of reduced consumption in this country. The total import for ten months of the calendar year was 901,481 pounds, as compared with 992,177 pounds for the equivalent period in 1926. Crops in all primary markets were excellent. Production reached a volume that was reflected in the prices paid. Fluctuations in the value of the franc were mainly such as would have brought about higher prices had production and consumption been different than they were. The fact was that vanilla in all markets, and particularly on spot, was comparatively cheap throughout the entire year. Prices were highest in January. They were lowest for Bourbons in August and again in October. Mexicans were cheapest at the end of the year. The high price for Bourbons was $3, paid in January. The lowest was $1.75, done in August. The latter figure was the lowest price at which Bourbons had sold since 1920. Mexicans were highest in January, $4.25 being quoted. They sold at $3.25 in December. This was the lowest price since 1915, when $2.50 was done. Prices were $3.50 from June almost through December.

One element that served to curtail demand toward the end of the year was a prospective cut in the price of ethyl alcohol. A reduction of $1.04½ per gallon on 190 proof was due January 1, 1928. Therefore, extract makers were loath to buy more beans than they could actually manufacture, preferring to keep their purchases down within the limits set by actual need for ethyl alcohol. The result was that at the end of the year makers of extracts held small stocks of beans, small quantities of alcohol, and limited amounts of manufactured products. This served to be a basis for the expectation that business would be much better with the turn of the year.

Flowers

Calendula was in a strong position most of the time, though the underproduction was not critical. The reason for the much smaller crop was poor growing weather and conditions. The price was 70c. on January 1 and reached 90c. by April 18. It sagged to 70c. by July 1 but was back to 72c. by August 1. By August 22 the market was back to 90c. on adverse news from Europe. A decline brought the market to 88c. on August 26 and to 85c. by October 3. By the end of the year the market was up to 90c. and very strong thereat, owing to limited stocks and little prospect for replacements in quantity. Ordinarily the change in prices for calendula flowers is very narrow each year, merely a few cents per pound either way. The time when prices are usually lowest is when new crop flowers arrive here—about September—October.

Arnica was one of the European botanicals to be produced so poorly as to cause one of the sharpest price advances of record. The market was lowest at 25c. in February, having declined from 27c. noted in January. By the end of the year $1.50 had been done, though at the end of December the market had slipped back to $1.48 for spot goods and $1.45 had been quoted for goods available at a nearby city. The cause for this unusual advance in prices was a crop so small that when ready for sale in Europe it was held in very few hands. Purchases made at low prices early in the year were oftentimes not delivered here; the shippers who sold short abroad, expecting a normal crop, got squeezed and could not obtain flowers regardless of price. This situation led to questions regarding the normal swing of prices for this article and a study was made.

Arnica usually undergoes a considerable swing in price. Under normal conditions it is cheapest in August-September. However, the normal experience in price change and cheapness has been upset since 1925. Beginning in that year the crop in Europe appears to have been smaller than normal. The result was that in 1925, 1926, and 1927 the lowest price was effective around the first of the year. In other words, when the crop was found to be subnormal in each year from 1925 on, prices for new crop were maintained.

The following gives an idea of price-swing in arnica and shows the month when prices were lowest:—

	High.	Low.	Cheapest month.
1921	$0.17	$0.11	August
1922	.14	.08	September
1923	.14	.07½	August
1924	.12	.08	August
1925	.12½	.09½	January
1926	.27	.12½	January
1927	1.50	.20	February

The record shows that the lowest price during the three years beginning 1925 was 9½c. in January of that year. The price advanced steadily each year thereafter, with very few setbacks. At no time was there a decline at new crop season. This is the abnormal situation that lowered crops have caused since 1925.

As to the outlook for the future, no one can say what the crops will be in the next and succeeding years. High prices ordinarily stimulate production. But there is absolutely no way of knowing at this time that large production will follow the present and recent era of high and advancing prices.

Insect (pyrethrum) flowers were subject to speculative activity of a strong and extensive character during the past year. The strength of the Japanese market was most apparent when, ordinarily, new crop expectations could be counted on to bring about a reduction in prices for shipment flowers. Though the crop was said to be an excellent one, it was narrowly held by strong factors in Japan and the result was a continued series of advances that forced the spot market for powder higher throughout the period August-December. There were fluctuations, but in the main the trend was upward. Prices for powder were lowest at 21c. in February, after an opening price of 22c. in January. By the end of April 23c. was being done under good demand against summer needs. May, June and a part of July found the market at 23c., but in the latter month 21c. was also done. In August the spot market advanced from 21c. to 26c. per pound, one of the sharpest rises in recent years. Though in September quotations reacted to 24c., the market was still fundamentally strong because of the closely controlled Japanese market. October and November were unchanged at 24c. In December a further rise put prices to 28c., which was the high point for the year. Sellers of powder in this market declared that the future of prices depends on the success of the Japanese speculation. If the market there can be held during the first quarter of the year, millers in this country count on very high prices for powder during the season of major consumption.

Spanish saffron passed through one of the weakest years within recent record. The decline in prices was steady throughout the period. Large production in Spain entirely offset the advances that took place in Spanish exchange from time to time. The highest price obtained during the year was $23, and that ruled in January. By the end of that month quotations were down to $18. During the first four months quotations swung from $18 to $20 per pound, the latter price ruling in April. That was the last flutter of an advance. Starting at $20 in April, the market declined and reached low for the year in December, $14 being the record. Shortly after the turn of the year as low as $12.50 was done. Competition between Spanish shippers was very keen at all times and with such large quantities available for prompt shipment, it was believed that the 1928 crop would be curtailed in size.

Herbs

Lobelia was one of the most sensational articles in the whole market. It may be recalled that the 1926 crop had been far below normal and that very high prices had been paid. The rise due to shortage continued into the new year, which opened at 85c. and was never lower than 83c. during January. A recession due to light demand put quotations down to 80c. per pound for all of February. In March a comeback in request advanced prices to 85c. at one time, though at others the market was 83c. During all of April 83c. was the prevailing figure.

The sensational rise in prices came in May when, in the first week of that month, prices became 92c., an advance of 9c. from the April close. Successive advances brought the article to the basis of $1. That price ruled unchanged and unshaken until the last week of the month, when it sagged to the basis of 95c. It remained unchanged at 95c. in June. The break in July was as sensational as had been the advance in April-May. Beginning July at 95c., it dropped to 90c., then

85c. and finally to 65c. per pound. The first week in August found quotations swept to the basis of 35c., only to be followed by 30c. and 25c. respectively. September business was recorded at a futher decline, to the basis of 20c.

The last quarter of the year was featured by steady if not such severe declines in prices. The result was that at the end of December the market was 16c. to 17c. per pound and very easy. The cause of the decline from $1 in May to 16c. in December was the size of the 1927 crop. High prices early in the year stimulated early collection of the article. Much of this stuff was immature when picked and though not favored by buyers weakened the market none the less. As the collection season advanced it was found that production was by far the greatest in many years. Warehouses in the south bulged with the article, and it was small wonder that holders slaughtered prices right and left in an effort to get something out of an article doomed for very low levels. Late in the year it was predicted that the next crop would be neglected by collectors, as the price to them in 1928 would surely be low.

Leaves

Buchu was subject to an unusual number of vicissitudes. Despite reports that from time to time declared the spot price trend to be out of line with that in the primary market, the downward trend here was clearly defined for the first six months of the year. Rather large spot supplies were available and the demand was disappointingly small. Distressed merchandise was constantly put forward in competition with other goods and the net result was a buyers' market for the entire six months. Prices in January were as high as 52c. and as low as 48c. By the end of June orders had been placed at 44c. July was steady at that figure but August brought the market to the low point for the year—namely, 43c. One quarter on the spot has sold October deliveries rather freely in expectation of ample receipts before deliveries were due. They failed to come. Therefore, the seller covered in the open market and the buying against short account put prices up to 50c. during October. The October advance totaled 5c. The upward movement continued into November, when 53c. was reached and proved to be the high point for the year. By the end of the month reaction set in. The reaction was due to the seller, who had been short in October deliveries, receiving his delayed shipments. He was forced to cut prices to move stocks. The decline continued in December, during which month quotations dropped from 52c. to the basis of 47c.

Henbane was a strong feature at mid-year, due to difficulty in getting merchandise released for consumption. Much of the material arriving failed to measure up to the U.S.P. requirements and rejections were constant. This tended to shorten stocks available for prompt deliveries and brought about an advance in prices. The market was low at 19c. in January. It advanced to 22c. in February and remained thereat in March. The squeeze on supplies was felt sharply in May and prices moved up from a minimum of 22c. to a high of 35c. That figure was high for the year and remained in force during June, July, and a part of August. In the latter month the market broke abruptly to 24c., due to arrivals of Russian henbane of a quality satisfactory to the Department of Agriculture. Declines continued. September found the market low at 23c. and in October, 21c. was reached. That figure ruled for the balance of the year.

Ergot

Ergot was the most prominent article in the group of miscellaneous botanicals. It reached a position of feature interest in September when speculative activity brought more than usual attention to the article. The background of the September developments was one of a quiet and orderly market. The year had opened with prices at $1.25 per pound and demand light. By the end of February downward reaction in prices put quotations to the basis of $1.10, while in March and April, $1.05 was most often paid. In May and June decided declines were forced by the pressure of ample stocks on a somewhat reluctant consuming market. Quotations were down to the basis of 90c. in June. The low point was reached in July when attempts to sell at 80c. per pound were but rarely successful.

It was in August that the definite break to higher prices developed. At that time, much to the surprise of many importers, spot stocks were found to be much smaller than any had supposed. During the week of August 8 the report here was that stocks were exhausted. That was perhaps an overstatement as it was subsequently found that, at a price, spot deliveries were to be had. The price for prompt deliveries was $1.40 per pound. The August advance was from 85c. low to $1.40 high. September opened at $1.40 but did not stay there very long.

Early in September speculators came to the front with a declaration to the effect that the crop in Spain was very small and had virtually been cornered by strong hands. The reports had it that the speculative interests intended to put the market to $5 per pound. There was no doubt about the Spanish market having been put into strong position through co-operation between certain Spanish shippers and some importers in the New York market, but those who might be termed regular importers, as well as manufacturing consumers, dealers, and some foreign shippers, reached a common ground of understanding and determined to avert such an extraordinary and uncalled for advance in prices by means of purchases abroad and co-operation among some of the larger manufacturing consumers who helped each other out from their stocks and by intelligent buying kept from bidding the market up on themselves.

From September through the remainder of the year, the consuming trades were able to get along without buying stocks held for speculative purposes. At no time did the actual market go above $1.60 per pound. Certain quarters quoted $2 to $2.50 per pound, but few if any sales at those prices were made.

Regular importers conserved their supplies. They reduced the quantities asked for by buyers, apportioning the available stock so that no legitimate manufacturing requirement need have gone unfilled. Sales were reported made at $1.60 in October and that was the high point for the year. From then on supplies in the hands of regular importers were increased from time to time and prices were reduced. The result was that before the end of October the market was down to the basis of $1.45 and in the next month was as low as $1.40 at one time. December prices prevailed at $1.45 without change. During the last two months of the year buying was fairly active. Local importers reported sales of several tons of material in ton lots, in addition to many smaller transactions.

In view of the market prominence of ergot in 1927 the following tabulation of imports at New York is of interest:—

From—	Bags 1927.	Bags 1926.
Spain	787	114
France	95	114
Germany	187	197
Poland	...	114
Holland	122	232
Belgium	7	52
United Kingdom	15	10
Sweden	...	9
Italy	...	18
Totals	1,213	870

Of the quantity imported, approximately 10 to 15 percent was rejected by Federal officials and returned to ports of shipment. During the last month of the year the marketing of the Russian crop was pending and was a factor in keeping spot prices steady at $1.45. Many transactions in ergot to arrive here in January, 1928, were reported, sales being made at $1.35, $1.25, and $1.20 per pound, duty paid. These sales were made on the basis of the goods being guaranteed to meet U.S.P. requirements in all respects "or no sale." The future trend of prices seemed to depend mainly on the quality of the 1927 crop of Russian ergot. At the close of the year conditions seemed to be favorable to buyers.

Manna had one very strong advance during the year. In fact, it might be stated that the trend was upward from January to October, during which time the price for large flake was advanced from 50c. per pound to the basis of 85c., while small went from 40c. to 65c. The advance was mainly due to the reason that successive crops in Italy were disappointing in size and scarcity abounded in shipment and spot goods from time to time. Stocks were more readily obtainable in the last quarter of the year. Prices for large flake in October went down to 70c. and ended the year at 65c. Small flake declined from 65c. in October to 55c. reached in November, and continued unchanged throughout the balance of the year.

Roots

Bloodroot was in about as low supply toward the close of the year as recent records disclose. From January through July 13½c. was quoted as a steady price at which but moderate business was done. In August adverse reports from collection centers put the market up to 15c., followed by a rise to 16c. in September. Shortage was acute in October and the market was lowest at 18c. and highest at 21c. The latter price was high for the year and ruled throughout December. Only jobbing orders could be filled and the prospect for still higher prices was excellent.

Production of golden seal in the past year was marketed under difficulties. Foreign countries are the main buyers of the crop; domestic consumption is comparatively small. Germany was the best buyer in 1927, but at no time was that country a heavy, steady, and consistent purchaser of the very ample stocks obtained in the primary markets during the collection season. The result was that the market went into

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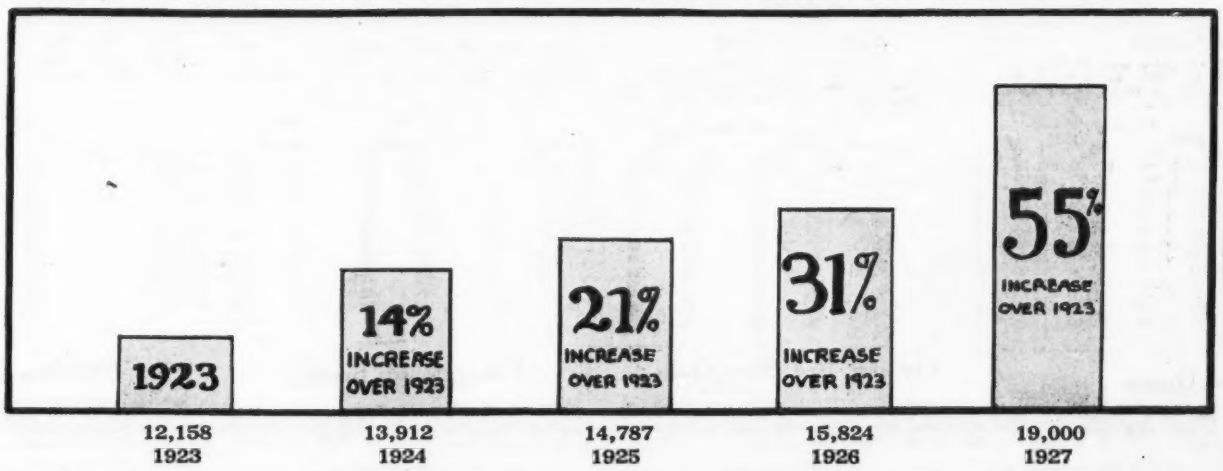

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the year-end somewhat topheavy with supplies and lacking the balance that better demand might have afforded. Quotations in January were $4.75 per pound, and the trend downward was quite steady throughout the year. The market was unchanged until March, when it went to $4.70. April found goods selling as low as $4.65, though at times $4.70 had to be paid for spot goods. Quotations were stable at $4.65 in May. The decline was resumed in June when sales were recorded at $4.60 per pound. July was lowest at $4.55 and August was a period of small sales at $4.50. September and October found conditions somewhat better; at least prices were stable at $4.50 per pound. November opened at that figure but broke quite promptly to $4.25 when competition became much keener, parallel with a demand for export quantities. December found the weakness still more pronounced and after opening at $4.25 dropped to $3.25 per pound, which was the low point for the year.

Rhubarb was an article prominent because of predictions for advances in prices that were never to materialize. Unsettled conditions in China were mainly responsible for the delays in shipping and were more or less a constant factor in the market throughout the year. However, it just happened that demand here was spread rather evenly throughout the year; at no time was there a call that could not be filled out of spot stocks. When shortage pended, replacements were secured from the London market, to which point China stocks had been moved by British merchants when it appeared that conditions in China were likely to interfere with the free movement of supplies. The downward trend in prices was at variance with predictions of an advance on spot. The market was highest at 55c. in January and lowest at 35c. in December. The December cut was mainly due to dumping of surplus stocks by those who had taken a speculative flier in the market when things seemed to favor higher prices. There were numerous anxious sellers in the market at the close of the year.

Sarsaparilla for once was an article favorably placed for buyers. After two or three years during which prices had been mainly high due to difficulty in getting a quality of root in Mexico that was certain to be released for consumption on arrival here, importers succeeded in getting the Mexicans to clean their merchandise properly. The result was a marked increase in available supplies and consequent declines in prices. January prices were uniform at 40c. per pound. By March, the spot market was paying no more than 36c. for prompt deliveries. At midyear, quotations were 30c. and destined for lower levels as stocks increased rapidly at that time. At the beginning of the last quarter of the year 25c. was asked, but in November the price was down to 22c. and, finally, in December it reached 21c., which was low for the year. The decline in prices was virtually 50 percent from those prevailing in January.

Senega underwent one of the sharpest advances of record since 1921. The cause of the advance was a small collection in the primary market. Bad weather caused a sharp cut in the quantities of root delivered into Winnipeg. Furthermore, the faulty drying of the crop caused an inferior quality of merchandise to be offered in some instances. Finally, co-operative undertakings between the five or seven principal factors in the Winnipeg market served to advance prices at the season when by right of normal experience quotations should have undergone marked decline. Though some quarters declared that there had been a large carryover from the 1926 crop, the fact remained that once the market was put to its high point for the year there was sign of neither weakness nor competition, however great the holding in the western market may have been. It was significant that the cheapest price was obtained in January, namely, 72c. per pound; usually the market is lowest at about midyear. By July, the spot market was up to $1.10, having advanced in that month from 80c. per pound. It was in that month that the underproduction was announced in company with the higher rates paid in Winnipeg for parcels to move into the export market. The advance was quite steady during the second semester of the year. From $1.10 in July the market went to $1.15 in August and then to $1.20 in September, at which time export demand was particularly pressing. October recorded sales at $1.25 and $1.27 per pound, respectively. The high point for the year was reached in November, when $1.28 was actually paid and as high as $1.30 was asked. The December close was at $1.27.

Valerian was an article placed similarly to Mexican sarsaparilla. For exactly the same reason, too high an ash content, which meant that the root exported to this country had not been properly cleaned, prices during the previous two years had ruled persistently high. The trouble with dirty root started after midyear in 1925 and it remained an aggravating factor in 1926. At no time since May, 1925, had valerian sold in the New York market for less than 20c. until, in November, 1927, sales were made at 18c. per pound, spot. The break in spot prices came mainly in the first six months of the year. Prices opened the year at 27c. but went to 30c. in February. That was high for the year. In March and April nothing above 28c. was obtained locally. Business in May was worked first at 28c. and subsequently at 27c. per pound. In June, two declines were named in prices. The first break brought spot quotations to 25c. and the second established 21c. From July through September buyers paid mostly 21c. per pound, though at times they obtained goods at 20c. October found the market weak at 21c. and then at 18c. The year ended with a December decline from 18c. to the low point for the year, namely, 18c. per pound.

Price Trends

Price trends over the year in forty typical botanical drugs, twenty domestic and twenty foreign, were as follows:—

	Mar., 31	June, 30	Sept., 30	Dec., 31
Aletris root	$0.42	$0.37	$0.40	$0.40
Arnica flowers	.55	.48	.70	1.48
Balm of Gilead	.38	.37	.35	.35
Black haw,root bark	.25	.24	.24	.27
Buchu leaves	.47	.44	.45	.47
Belladonna leaves	.19	.19	.18½	.18½
Belladonna root	.18	.19	.19½	.19
Blood root	.13½	.13½	.16	.22
Cascara sagrada bark	.14½	.14½	.15	.13½
Chamomile flowers, Hungarian	.30	.29	.23	.19
Clover tops	.12	.10	.11	.10
Cinchona quills	.60	.60	.58	.58
Cramp bark, genuine	.55	.45	.50	.50
Cottonroot bark	.12½	.12	.12½	.12
Deer tongue leaves	.19	.20	.17	.15
Ergot	1.05	.90	1.60	1.45
Elm bark, select	.20	.21	.21	.24
Elder flowers	.14½	.13	.16	.19
Golden seal root	4.70	4.60	4.50	3.75
Henbane leaves	.22	.35	.23	.21
Insect powder	.21	.23	.24	.28
Jaborandi leaves	.10	.12	.12	.12
Jalap root	.18	.16	.16	.15
Ko'a nuts	.06	.11	.09	.09
Lobelia herb	.83	.95	.20	.16
Lycopodium	.83	.80	.72	.73
Mandrake root	.12	.12	.14	.15
Manna flake, large	.53	.65	.85	.65
Rhubarb root	.47	.46½	.42	.35
Sage leaves, Greek	*	*	*	.03½
Sarsaparilla, Mex	.36	.30	.25	.21
Sassafras bark, select	.26	.25	.26	.25
Senega root	.80	.80	1.25	1.27
Senna leaves, T. V.	.07½	.07½	.07½	.07½
Soap bark, whole	.11	.10	.14	.14
Stramonium leaves	.19	.16	.16	.18
Uva ursi	.05	.05½	.05½	.05½
Valerian root, USP	.28	.21	.21	.17
Wahoo root, bark	.63	.55	.55	.58
Wild cherry bark, thin green	.08½	.07½	.07½	.07½

* No stocks.

	1927.	1926.	1925.
Advanced	17	17	15
Reduced	21	15	20
Unchanged	2	8	5

Botanical Drugs: Record of Prices

Balsams

Copaiba, Para

October 18, 1871, the price was 77½c. to 80c.; 1881, 52½c. to 54c.; 1891, 62½c. to 55c.; 1901, 45c. to 50c.; 1911, 60c. to 85c.; 1918, 48c. to 50c.; 1919, March, 75c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.37	$0.37	$0.45	$0.44
February	.37	.37	.47½	.45
March	.41	.40	.47½	.47½
April	.41	.40	.55	.47½
May	.40	.40	.57	.55
June	.40	.40	.50	.48
July	.40	.40	.48	.46
August	.40	.40	.46	.45
September	.40	.40	.45	.45
October	.42	.40	.45	.42
November	.45	.42½	.45	.42
December	.45	.45	.45	.45
Year	.45	.37	.57	.42

Copaiba, South American

October 18, 1871, the price was 77½c. to 80c.; 1881, 52½c. to 54c.; 1891, 60c.; 1901, 35c. to 40c.; 1911, 38c. to 45c.; 1918, 44c. to 48c.; 1918, January, 97½c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.42	$0.42	$0.50	$0.49
February	.42	.42	.52½	.50
March	.47	.45	.52½	.52½
April	.47	.46	.60	.52½
May	.47	.46	.60	.60
June	.46	.45	.52	.51
July	.45	.45	.50	.48
August	.45	.45	.48	.47½
September	.45	.44	.47½	.47½
October	.47	.44	.47½	.45
November	.50	.42½	.50	.45
December	.50	.50	.50	.50
Year	.50	.42	.60	.45

Fir, Canada

November 22, 1871, the price was $3 to $3.50; October 18, 1881, $2.25; 1891, $1.70 to $1.90; 1901, $3.65 to $3.75; 1911, $4.10 to $4.25; 1913, $9.50 to $10; 1920, April, $16.

	Per gallon— 1926. H.	L.	1927. H.	L.
January	$11.00	$11.00	$12.00	$11.25
February	11.50	11.00	12.00	12.00
March	11.50	11.50	12.00	12.00
April	11.50	11.50	12.00	12.00
May	11.50	11.50	12.00	12.00
June	11.50	11.50	12.00	12.00
July	11.50	11.50	12.00	12.00
August	11.50	11.00	12.00	12.00
September	11.00	11.00	12.00	12.00
October	11.00	11.00	12.00	12.00
November	11.00	11.00	12.00	12.00
December	11.25	11.00	12.00	12.00
Year	11.50	11.00	12.00	11.25

Fir, Oregon

March 26, 1873, the price was $3.50; October 18, 1881, nominal; 1891, $1 to $1.10; 1901, 75c. to 80c.; 1911, 80c. to 90c.; 1913, $1.30 to $1.50; 1919, December, $1.90.

	Per gallon— 1926. H.	L.	1927. H.	L.
January	$0.95	$0.95	$1.50	$1.35
February	1.00	.95	1.50	1.40
March	1.00	.95	1.60	1.50
April	.95	.95	1.60	1.50
May	1.00	.95	1.50	1.40
June	1.00	1.00	1.40	1.40
July	1.00	.95	1.25	1.25
August	.95	.90	1.25	1.20
September	.90	.90	1.20	1.15
October	1.25	.90	1.25	1.15
November	1.25	1.25	1.50	1.25
December	1.35	1.25	1.65	1.50
Year	1.35	.90	1.65	1.15

Peru

October 18, 1871, the price was $3.90; 1881, $2.75 to $3; 1891, $1.20 to $1.40; 1901, $1.30 to $1.40; 1911, $1.50 to $1.90; 1913, $1.50 to $1.60; 1920, February, $5.75.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.80	$1.80	$1.70	$1.70
February	1.80	1.80	1.70	1.70
March	1.80	1.80	1.70	1.70
April	1.80	1.80	1.70	1.65
May	1.80	1.80	1.65	1.65
June	1.80	1.75	1.65	1.60
July	1.75	1.75	1.65	1.65
August	1.70	1.70	1.65	1.65
September	1.70	1.70	1.65	1.65
October	1.75	1.70	1.65	1.65
November	1.70	1.70	1.65	1.65
December	1.70	1.70	1.65	1.65
Year	1.80	1.70	1.70	1.60

Tolu

October 18, 1871, the price was 80c.; 1881, 65c. to 70c.; 1891, 27c. to 30c.; 1901, 33c. to 35c.; 1911, 50c. to 60c.; 1913, 80c. to 85c.; 1919, October, $1.75.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$1.30	$1.20	$0.95	$0.95
February	1.25	1.15	.95	.90
March	1.15	1.05	.95	.90
April	1.10	1.05	.95	.90
May	1.10	1.10	.90	.90
June	1.10	1.05	.85	.85
July	1.05	1.05	.85	.85
August	1.05	1.05	.85	.85
September	1.05	1.00	.85	.85
October	1.00	.95	1.25	.85
November	1.00	.95	1.25	1.25
December	1.00	.95	1.20	1.00
Year	1.30	.95	1.25	.85

Barks

Black Haw Root

December 20, 1897, the price was 7½c. to 8½c.; October 18, 1901, 10½c. to 12c.; 1911, 19c. to 20c.; 1913, 16c. to 18c.; 1918, December, 65c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.29	$0.28	$0.25	$0.25
February	.28	.27	.25	.25
March	.27	.27	.25	.25
April	.27	.27	.25	.25
May	.27	.26	.25	.25
June	.26	.26	.25	.24
July	.25	.25	.24	.23
August	.25	.25	.26	.23
September	.25	.25	.26	.24
October	.25	.25	.29	.24
November	.25	.25	.29	.29
December	.25	.25	.29	.29
Year	.29	.25	.29	.23

Cinchona, Red, Short, Quills

November 22, 1871, the price was 90c. to $1; October 18, 1881, 15c. to $1.75; 1891, 25c. to 35c.; 1901, 20c. to 25c.; 1911, 18c. to 20c.; 1913, 20c. to 28c.; 1918, May, $1.25.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.65	$0.65	$0.60	$0.60
February	.65	.65	.60	.60
March	.65	.65	.60	.60
April	.65	.60	.60	.60
May	.60	.60	.60	.60
June	.60	.60	.60	.60
July	.60	.60	.60	.58
August	.60	.60	.58	.58
September	.60	.60	.58	.58
October	.60	.60	.58	.58
November	.60	.60	.58	.58
December	.65	.60	.58	.58
Year	.65	.65	.60	.58

Cascara Sagrada, New Crop

March 31, 1880, the price was 40c. to 50c.; October 18, 1891, 5c. to 6c.; 1901, 5c. to 7c.; 1911, 9c. to 10½c.; 1913, 7½c. to 10c.; 1918, September, 19c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.13	$0.13	$0.15	$0.15
February	.13	.13	.15	.14½
March	.13	.12¼	.14½	.14½
April	.12½	.12¼	.14½	.14½
May	.12¼	.12½	.14¼	.14½
June	.12¼	.12½	.14½	.14½
July	.13½	.12¼	.14½	.14½
August	.15	.13½	.14½	.14½
September	.15	.15	.15	.15
October	.15	.15	.15	.13½
November	.15	.15	.13½	.13½
December	.15	.15	.13½	.13½
Year	.15	.12¼	.15	.13½

Condurango

November 22, 1871, the price was $6 to $8; October 18, 1898, 18c.; 1901, 14c. to 16c.; 1911, 17c. to 18c.; 1913, 12½c. to 14c.; 1917, September, 14c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.12¼	$0.12¼	$0.13	$0.13
February	.12½	.12½	.13	.13
March	.13	.13	.13	.12½
April	.13	.13	.13	.12½
May	.13	.13	.13	.13
June	.13	.13	.13	.13
July	.13	.13	.13	.13
August	.13	.13	.13	.13
September	.13	.13	.13	.13
October	.13	.13	.13	.13
November	.13	.13	.13	.13
December	.13	.13	.13	.13
Year	.13	.12½	.13	.12½

Cottonroot

August 25, 1886, the price was 8c. to 9c.; October 18, 1881, 8c. to 9c.; 1900, 8½c. to 10c.; 1911, 22c. to 23c.; 1913, 6c. to 7c.; 1920, August, 80c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.13¼	$0.13	$0.12½	$0.11¼
February	.13¼	.13	.13	.12¼
March	.13½	.13	.12¼	.12¼
April	.13	.12	.12¼	.12½
May	.12	.12	.12½	.12
June	.12	.12	.12	.12
July	.12	.12	.12	.12
August	.12	.12	.12	.12
September	.12	.12	.12¼	.12½
October	.12	.12	.12½	.12¼
November	.12	.11¼	.13	.12½
December	.11¼	.11¼	.13	.12
Year	.13½	.11½	.13	.11½

Elm, Selected, Bundles

February 18, 1874, the price was 16c.; October 8, 1881, 12½c. to 14c.; 1891, 12½c. to 14c.; 1901, 12c.; 1911, 17c. to 20c.; 1913, 7c. to 21c.; 1920, October, 90c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.24	$0.24	$0.20	$0.20
February	.23	.22	.21	.20
March	.22	.20	.20	.20
April	.20	.20	.21	.20
May	.20	.20	.21	.21
June	.20	.20	.21	.21
July	.20	.20	.21	.21
August	.20	.20	.21	.21
September	.20	.20	.21	.21
October	.20	.20	.21	.21
November	.20	.20	.21	.21
December	.20	.20	.24	.23
Year	.24	.20	.24	.20

Lemon Peel

October 18, 1911, the price was 5c. to 6c.; 1913, 6¼c. to 7c.; 1918, January, 10c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.07½	$0.07½	$0.10	$0.09½
February	.07½	.07½	.10	.10
March	.07½	.07½	.11	.10
April	.07½	.07½	.11	.11
May	.07½	.07½	.11	.09
June	.07½	.07½	.09	.09
July	.07½	.07½	.09	.09
August	.07½	.07½	.09	.09
September	.07½	.07½	.09	.09
October	.08½	.07½	.09	.09
November	.09½	.09	.09½	.09½
December	.09½	.09	.09½	.09½
Year	.09½	.07½	.11	.09

Orange Peel, Bitter Curacao

November 22, 1871, the price was 8c. to 9c.; October 18, 1881, 13c. to 14c.; 1891, 4½c. to 10c.; 1901, 3c. to 4c.; 1911, 4c. to 5c.; 1913, 4c. to 5c.; 1919, August, 21c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.07	$0.07	$0.08	$0.06½
February	.07	.07	.12	.07¾
March	.07	.07	.12	.12
April	.07	.07	.11	.10
May	.07	.07	.11	.10
June	.07	.07	.13	.10
July	.07	.07	.10	.10
August	.06½	.06½	.10	.10
September	.06½	.06½	.10	.10
October	.06½	.06½	.10	.10
November	.06½	.06½	.10	.09
December	.06½	.06½	.09	.09
Year	.07	.06½	.13	.06½

Prickly Ash

April 3, 1878, the price, crushed, was 13c.; October 18, 1881, 10c. to 16c.; 1891, 9c. to 10c.; 1901, 8c. to 10c.; 1911, 28c. to 35c.; 1916, 14c. to 16c.; 1920, December, 28c.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.13	$0.13	$0.15	$0.15
February	.13	.13	.15	.15
March	.13	.13	.15	.13½
April	.14	.14	.13½	.13½
May	.14	.13½	.13½	.13½
June	.13½	.13	.13½	.13½
July	.15	.13	.13½	.13½
August	.15	.15	.13½	.13½
September	.15	.15	.13½	.13½
October	.15	.15	.13½	.13½
November	.15	.15	.13½	.13½
December	.15	.15	.13½	.13½
Year	.15	.13	.15	.13½

Sassafras, Ordinary

November 22, 1871, the price was 5c. to 5½c.; October 18, 1881, 6c. to 6¼c.; 1891, 8c. to 10c.; 1901, 6¼c. to 10c.; 1911, 12c. to 14c.; 1913, 11c. to 13c.; 1919, December, 49.

	Per pound— 1926. H.	L.	1927. H.	L.
January	$0.16	$0.16	$0.15	$0.15
February	.16	.16	.15	.15
March	.16	.15	.15	.15
April	.15	.15	.15	.15
May	.15	.15	.15	.15
June	.15	.15	.15	.15
July	.15	.15	.15	.15
August	.15	.15	.15	.15
September	.15	.15	.15	.15
October	.15	.15	.15	.15
November	.15	.15	.15	.15
December	.15	.15	.15	.15
Year	.16	.15	.15	.15

Soapbark, Whole

April 2, 1878, the price was 8c.; October 18, 1881, 4½c. to 6½c.; 1891, 8½c. to 9c.; 1901, 3½c. to 4c.; 1911, 6c. to 6½c.; 1913, 8½c. to 9½c.; 1919, August, 16c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.09	$0.09	$0.09	$0.09
February	.09	.09	.10	.09
March	.09	.09	.11	.10
April	.09	.09	.11	.11
May	.09	.09	.11	.10
June	.09	.09	.10	.10
July	.10	.09	.12	.10
August	.10	.10	.12	.12
September	.10	.10	.14	.14
October	.10	.09	.14	.14
November	.09	.09	.14	.14
December	.09	.09	.14	.14
Year	.10	.09	.14	.09

Soapbark, Cut and Sifted

April 2, 1878, the price was 3c.; October 22, 1886, 6c. to 7c.; 1911, 8c. to 8½c.; 1913, 10c.; 1920, May, 20c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.09½	$0.09¼	$0.10	$0.10
February	.09¼	.09¼	.13½	.10
March	.09¼	.09¼	.13½	.13½
April	.09¼	.09¼	.13½	.13½
May	.09¼	.09¼	.13	.13
June	.09¼	.09¼	.13	.13
July	.09½	.09¼	.14½	.13
August	.09½	.09½	.14½	.14½
September	.10	.10	.16	.16
October	.10½	.10	.16	.16
November	.10	.10	.16	.16
December	.10	.10	.18	.15
Year	.10½	.09¼	.18	.10

Soapbark, Crushed

April 2, 1878, the price was 16c.; October 18, 1881, 8c. to 8½c.; 1891, 9c. to 10c.; 1901, 5c. to 6c.; 1911, 7c. to 7½c.; 1913, 10c.; 1919, August, 23c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11	$0.11	$0.11	$0.11
February	.11	.11	.13½	.11
March	.11	.11	.13½	.13½
April	.11	.11	.13½	.13½
May	.11	.11	.13	.13
June	.11	.11	.13	.13
July	.11	.11	.15	.13
August	.11	.11	.15	.15
September	.11	.11	.17	.17
October	.11	.11	.16	.16
November	.11	.11	.16	.16
December	.11	.11	.16	.15
Year	.11	.11	.17	.11

Wahoo Root

December 20, 1897, the price was 19c. to 20c.; October 18, 1901, 16c. to 20c.; 1911, 40c. to 42c.; 1913, 36c. to 50c.; 1920, December, 90c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.70	$0.70	$0.64	$0.64
February	.70	.69	.64	.63
March	.70	.67	.63	.63
April	.67	.67	.63	.63
May	.67	.66	.63	.55
June	.66	.65	.55	.55
July	.65	.65	.55	.55
August	.65	.65	.55	.55
September	.65	.65	.55	.55
October	.65	.64	.55	.55
November	.64	.64	.58	.55
December	.64	.64	.58	.58
Year	.70	.64	.64	.55

Wild Cherry, Thin, Unrossed

April 28, 1875, the price was 7c.; October 18, 1881, 9c.; 1901, 7½c.; 1911, 9c.; 1913, 9c.; 1919, January, 35c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.07½	$0.07½	$0.07½	$0.07½
February	.07½	.07½	.08½	.07½
March	.07½	.07½	.08½	.08½
April	.07½	.07½	.08½	.08½
May	.07½	.07½	.08½	.07½
June	.07½	.07½	.07½	.07½
July	.07½	.07½	.07½	.07½
August	.07½	.07½	.07½	.07½
September	.07½	.07½	.07½	.07½
October	.07½	.07½	.07½	.07½
November	.07½	.07½	.07½	.07½
December	.07½	.07½	.07½	.07½
Year	.07½	.07½	.08½	.07½

Vanilla, Bourbon, Whole

April 14, 1880, the price was $5 to $8; October 18, 1881, $6 to $10; 1891, $3 to $6; 1901, $4.75 to $8.50; 1911, $3.85 to $4.50; 1919, $3 to $3.75; 1919, August, $3.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.75	$2.50	$3.00	$2.75
February	2.50	2.50	2.75	2.50
March	3.75	2.50	2.65	2.50
April	3.75	3.75	2.65	2.65
May	4.00	3.75	2.65	2.65
June	3.75	3.25	2.25	2.10
July	3.25	2.75	2.10	2.00
August	2.75	2.75	2.00	1.75
September	3.00	2.75	2.00	1.90
October	3.00	2.75	1.75	2.00
November	3.00	2.75	2.25	2.00
December	3.00	3.00	2.00	2.00
Year	4.00	2.50	3.00	1.75

Twenty-eight Years' Prices

	H.	L.
1927	$3.00	$1.75
1926	4.00	2.50
1925	9.50	2.75
1924	12.00	6.00
1923	6.00	2.75
1922	3.00	2.75
1921	2.75	1.50
1920	3.00	1.75
1919	2.85	2.25
1918	2.75	2.00
1917	2.50	2.00
1916	2.75	2.50
1915	3.50	2.25
1914	4.50	2.75
1913	3.10	2.75
1912	4.50	3.00
1911	3.75	2.75
1910	3.00	2.75
1909	3.00	1.75
1908	3.00	1.50
1907	3.00	1.25
1906	1.50	1.00
1905	1.50	1.00
1904	1.50	1.50
1903	2.50	1.50
1902	3.00	2.50
1901	4.75	3.00
1900	4.50	4.00

Vanilla, Mexican, Whole

November 22, 1871, the price was $14 to $16; October 18, 1881, $5 to $15; 1891, $4 to $8; 1901, $8 to $13.50; 1911, $4 to $5; 1913, $3.75 to $5; 1917, April, $5.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$6.75	$6.00	$4.25	$4.25
February	6.00	6.00	4.25	4.00
March	6.00	6.00	4.00	3.75
April	6.00	6.00	3.75	3.75
May	6.00	6.00	3.75	3.75
June	6.00	5.50	3.50	3.50
July	5.50	6.00	3.50	3.50
August	5.00	5.00	3.50	3.50
September	5.00	5.00	3.50	3.50
October	5.00	4.75	3.50	3.50
November	4.75	4.50	3.50	3.50
December	4.50	4.50	3.50	3.25
Year	6.75	4.50	4.25	3.25

Twenty-eight Years' Prices

	H.	L.
1927	$4.25	$3.25
1926	8.75	4.50
1925	11.00	6.75
1924	13.00	10.50
1923	11.00	8.50
1922	12.00	7.50
1921	7.00	3.50
1920	4.50	3.75
1919	4.50	4.25
1918	4.75	4.25
1917	5.00	4.50
1916	5.00	3.75
1915	3.75	2.50
1914	5.00	3.50
1913	4.00	3.62½
1912	5.00	3.50
1911	4.00	2.75
1910	3.37½	2.75
1909	3.25	2.75
1908	4.25	3.00
1907	4.25	2.75
1906	2.75	2.75
1905	3.59	2.75
1904	5.00	3.75
1903	6.50	5.00
1902	6.75	4.75
1901	9.00	6.75
1900	11.00	9.00

Juniper

January 17, 1872, the price was 4½c. to 5c.; October 18, 1881, 3½c. to 4c.; 1891, 2½c. to 3c.; 1901, 2¾c. to 3c.; 1911, 3¼c. to 3¾c.; 1913, 4c. to 4½c.; 1919, 12c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05	$0.04¾	$0.07	$0.07
February	.05½	.05	.07	.07
March	.06	.06	.07	.07
April	.07½	.06	.07	.07
May	.07½	.07½	.07	.07
June	.08½	.07½	.06½	.06½
July	.08½	.07	.06½	.06½
August	.09	.08½	.06½	.06
September	.10½	.09	.07	.06½
October	.10½	.06¾	.07	.06½
November	.07½	.07	.07	.07
December	.07	.07	.07	.06½
Year	.10½	.04¾	.07	.06

Prickly Ash

January 19, 1881, the price was 90c. to $1; October 18, 1881, 90c. to $1; 1891, $1; 1901, 45c. to 60c.; 1911, 75c. to 81c.; 1913, 24c. to 30c.; 1919, September, 14c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.80	$0.50	$0.20	$0.20
February	.70	.70	.20	.20
March	.75	.75	.20	.20
April	.80	.75	.20	.20
May	.75	.75	.20	.20
June	.75	.75	.20	.20
July	.75	.75	.20	.20
August	.75	.29	.20	.20
September	.30	.29	.20	.20
October	.30	.25	.20	.20
November	.25	.20	.20	.20
December	.20	.20	.20	.20
Year	.80	.20	.20	.20

Flowers

Arnica

November 22, 1871, the price was 10c. to 11c.; October 18, 1881, 9c. to 10c.; 1891, 16c. to 18c.; 1901, 8½c. to 9½c.; 1911, 13c. to 14c.; 1913, 15c. to 16c.; 1917, April, $3.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.13	$0.12½	$0.27	$0.26
February	.14	.13	.45	.25
March	.16	.14	.55	.55
April	.17	.16	.55	.50
May	.17	.17	.50	.50
June	.17	.16	.50	.48
July	.16	.15	.48	.47
August	.15	.15	.50	.50
September	.21	.19	.70	.55
October	.21	.20	1.25	.70
November	.20	.20	1.50	1.25
December	.27	.25	1.50	1.48
Year	.27	.12½	1.50	.25

Chamomile, Roman

October 18, 1871, the price was 20c. to 30c.; 1881, 14c. to 16c.; 1891, 20c. to 35c.; 1901, 18c. to 20c.; 1911, 27c. to 35c.; 1913, 21c. to 24c.; 1917, May, $1.35.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.13	$0.12½	$0.21	$0.21
February	.20	.18	.21	.21
March	.25	.24	.21	.21
April	.25	.21	.21	.21
May	.21	.20	.21	.21
June	.20	.20	.21	.21
July	.20	.20	.21	.21
August	.20	.20	.21	.21
September	.20	.20	.21	.21
October	.21	.21	.21	.21
November	.21	.21	.21	.21
December	.21	.21	.21	.21
Year	.25	.12½	.21	.21

Insect Powder

(May 29, 1872, the price was 55c. to 80c.; October 18, 1881, 40c. to 42c.; 1891, 17c. to 24c.; 1901, 15c. to 24c.; 1911, 14c. to 30c.; 1913, 22c. to 40c.; 1920, March, $1.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.25	$0.24	$0.22	$0.22
February	.24	.23	.21	.21
March	.24	.23	.21	.21
April	.24	.23	.23	.21
May	.23	.23	.23	.23
June	.23	.23	.23	.23
July	.23	.23	.23	.21
August	.24	.22	.26	.21
September	.22	.22	.26	.24
October	.22	.20	.24	.24
November	.19	.19	.24	.24
December	.22	.19	.28	.24
Year	.25	.19	.28	.21

Lavender, Ordinary

June 12, 1872, the price was 5c. to 6c.; October 18, 1881, 4c. to 5½c.; 1891, 3c. to 5c.; 1901, 4c. to 5c.; 1911, 7c. to 9c.; 1913, 10c. to 11c.; 1919, January, 27c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.27	$0.27	$0.35	$0.30
February	.27	.27	.35	.35
March	.27	.27	.35	.35
April	.27	.27	.35	.35
May	.27	.25	.35	.34
June	.25	.25	.34	.34
July	.25	.25	.34	.34
August	.25	.25	.34	.34
September	.25	.25	.34	.34
October	.25	.25	.34	.31
November	.25	.24	.31	.31
December	.30	.30	.31	.31
Year	.30	.24	.35	.31

Saffron, American

November 22, 1871, the price was $1.75 to $2; October 18, 1881, 40c.; 1891, 24c.; 1901, 14c. to 20c.; 1911, 30c. to 32c.; 1913, 60c. to 65c.; 1917, January, 75c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.40	$0.40	$0.38	$0.38
February	.40	.40	.36	.35
March	.40	.40	.37	.35
April	.40	.40	.35	.35
May	.40	.40	.35	.35
June	.40	.40	.35	.35
July	.40	.40	.35	.35
August	.40	.40	.35	.35
September	.38	.38	.35	.35
October	.38	.38	.35	.35
November	.38	.38	.35	.35
December	.38	.38	.35	.35
Year	.40	.38	.38	.35

Eighteen Years' Prices

	H.	L.
1927	$0.38	$0.35
1926	.40	.38
1925	.60	.40
1924	.80	.60
1923	1.40	.78
1922	1.50	1.05
1921	1.85	.68
1920	1.60	.33
1919	.40	.33
1918	.48	.39
1917	.75	.45
1916	2.00	.75
1915	1.25	.32
1914	.60	.35
1913	.45	.30
1912	.45	.33
1911	.33	.18
1910	.35	.18

Saffron, Spanish

November 22, 1871, the price was $13 to $14; October 18, 1881, $17 to $18; 1891, $9.50 to $11.50; 1901, $6.75 to $7; 1911, $10 to $11; 1913, $12.25 to $12.75; 1918, July, $16.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$30.00	$26.00	$23.00	$18.00
February	25.00	25.00	19.00	18.00
March	25.00	24.50	20.00	18.00
April	25.00	24.50	20.00	20.00
May	23.75	22.00	19.00	19.00
June	22.00	22.00	18.00	17.00
July	22.00	21.00	17.50	17.00
August	21.50	21.00	16.00	16.00
September	25.50	23.50	16.00	15.25
October	24.50	24.00	15.25	14.50
November	29.00	24.00	14.50	14.50
December	27.00	23.00	14.50	14.00
Year	30.00	21.00	23.00	14.00

Herbs and Leaves

Aconite

April 2, 1878, the price of powder was 20c. to 21c.; October 18, 1881, 8c. to 10c.; 1891, 10c. to 11c.; 1901, 9c. to 10c.; 1911, 7c. to 8c.; 1913, 7c. to 8c.; 1920, August, 70c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12	$0.12	$0.09	$0.09
February	.12	.12	.09	.09
March	.12	.12	.09	.09
April	.12	.12	.09	.09
May	.12	.12	.09	.09
June	.12	.12	.09	.09
July	.09	.09	.09	.09
August	.09	.09	.09	.09
September	.09	.09	.10	.09
October	.09	.09	.10	.10
November	.09	.09	.10	.10
December	.09	.09	.10	.10
Year	.12	.09	.10	.09

Belladonna

April 2, 1878, the price of powder was 26c. to 27c.; October 18, 1881, whole, 14c. to 16c.; 1891, 11c. to 15c.; 1901, 14c. to 16c.; 1911, 14c. to 17c.; 1913, 16c.; 1918, February, $1.05.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.23	$0.23	$0.19	$0.18
February	.23	.21	.19	.19
March	.21	.20	.19	.19
April	.22	.20	.19	.19
May	.21	.21	.19	.19
June	.21	.21	.19	.19
July	.21	.21	.19	.18
August	.21	.21	.19	.18
September	.21	.21	.19	.18½
October	.21	.21	.18½	.18½
November	.21	.19	.18½	.18½
December	.19	.18	.18½	.18½
Year	.23	.18	.19	.18

Buchu, Short

November 22, 1871, the price of short was 15c. to 16c.; long, 24c. to 26c.; October 18, 1881, short, 18c. to 20c.; long, 47c. to 50c.; 1891, short, 11c. to 20c.; long, 65c.; 1901, short, 26c. to 28c.; long, 75c.; 1911, short, $1.10 to $1.15; long, 65c. to 70c.; 1913, short, $1.30 to $1.35; long, $1.30 to $1.35; 1920, short, June, $4; long, October, $3.30.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.55	$0.50	$0.52	$0.48
February	.50	.48	.48	.48
March	.48	.45	.47	.47
April	.45	.45	.48	.47
May	.45	.45	.46	.45
June	.45	.45	.45	.44
July	.47	.45	.44	.44
August	.47	.45	.44	.43
September	.50	.45	.45	.43
October	.55	.50	.50	.45
November	.53	.52	.53	.52
December	.52	.52	.52	.47
Year	.55	.45	.53	.43

Sixteen Years' Prices

	H.	L.
1927	$0.53	$0.43
1926	.55	.45
1925	.80	.55
1924	.85	.73
1923	1.10	.85
1922	1.12	.85
1921	2.60	1.15
1920	4.00	2.35
1919	3.25	1.75
1918	2.60	1.15
1917	1.35	1.15
1916	1.30	1.15
1915	1.55	1.05
1914	1.85	1.30
1913	1.50	1.25
1912	1.65	.95

Cannabis, Domestic, U.S.P.

May 8, 1899, the price was 14c. to 15½c.; October 18, 1901, 50c. to 55c.; 1911, $1.25 to $1.30; 1913, $1.45; 1918, January, $1.50.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.30	$0.30	$0.24	$0.23
February	.30	.30	.23	.23
March	.30	.30	.23	.23
April	.27	.27	.23	.23
May	.25	.24	.23	.21
June	.24	.23	.21	.21
July	.25	.24	.21	.21
August	.33	.33	.21	.21
September	.33	.24	.30	.21
October	.24	.23	.30	.22
November	.23	.23	.20	.20
December	.24	.24	.20	.20
Year	.33	.23	.30	.20

Berries

Cubeb XX

January 12, 1881, the price was 25c.; October 18, 1881, $1; 1891, 85c.; 1901, 14c. to 17c.; 1911, 44c. to 46c.; 1913, 40c. to 42c.; 1920, January, $1.50.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.55	$0.49	$0.49
February	.56	.55	.48	.48
March	.55	.55	.48	.48
April	.55	.55	.48	.45
May	.55	.55	.45	.45
June	.55	.55	.45	.45
July	.55	.55	.45	.45
August	.55	.51	.45	.45
September	.51	.51	.45	.45
October	.51	.50	.45	.45
November	.49	.49	.45	.45
December	.49	.49	.45	.45
Year	.60	.49	.49	.45

Cubeb, Powdered

October 18, 1871, the price was 35c.; 1881, $1.35; 1891, 80c.; 1901, 14c. to 17c.; 1911, 44c. to 46c.; 1913, 40c. to 42c.; 1919, November, $1.45

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.60	$0.50	$0.50
February	.60	.60	.50	.49
March	.60	.60	.49	.49
April	.60	.60	.49	.48
May	.60	.60	.48	.47
June	.60	.60	.47	.47
July	.60	.54	.47	.47
August	.54	.52	.47	.45
September	.52	.52	.45	.45
October	.52	.52	.45	.45
November	.52	.50	.45	.45
December	.50	.50	.45	.45
Year	.60	.50	.50	.45

Beans

Calabar

February 16, 1881, the price was 40c.; October 18, 1881, 40c.; 1891, 16c. to 18c.; 1901, 8c. to 12c.; 1911, 37c. to 60c.; 1913, 25c. to 30c.; 1918, October, 75c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.60	$0.35	$0.35
February	.60	.60	.35	.35
March	.60	.50	.35	.35
April	.50	.50	.35	.35
May	.45	.45	.35	.25
June	.45	.45	.25	.25
July	.45	.45	.25	.25
August	.45	.40	.25	.25
September	.40	.40	.25	.25
October	.35	.35	.25	.25
November	.35	.35	.25	.25
December	.35	.35	.25	.25
Year	.60	.35	.35	.25

Tonka, Angostura

November 22, 1871, the price was 55c. to 60c.; October 18, 1881, $2.50 to $3.25; 1891, $1.80 to $2.20; 1901, 80c. to 85c.; 1911, $5.25 to $5.50; 1913, $1.75 to $2; 1919, July, $1.75.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.00	$1.90	$1.90	$1.90
February	1.90	1.90	1.90	1.90
March	1.90	1.90	1.90	1.75
April	1.90	1.90	1.75	1.75
May	1.90	1.90	1.75	1.75
June	1.90	1.90	1.75	1.75
July	1.90	1.90	1.75	1.75
August	1.90	1.90	1.75	1.75
September	1.90	1.90	1.75	1.75
October	1.90	1.90	1.75	1.75
November	1.90	1.90	1.75	1.75
December	1.90	1.90	1.75	1.75
Year	2.00	1.90	1.90	1.75

Deer Tongue

April 2, 1878, the price was 8c.; October 18, 1881, 7c. to 8c.; 1901, 3c. to 4c.; 1911, 8c. to 9c.; 1913, 7½c. to 8c.; 1918, February, 25c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.21	$0.13	$0.20	$0.20
February	.23	.23	.20	.20
March	.23	.17½	.20	.19
April	.17	.17	.19	.19
May	.20	.20	.22	.19
June	.20	.20	.22	.20
July	.20	.18	.18	.16
August	.18	.18	.18	.16
September	.16	.13	.18	.17
October	.15½	.14½	.17	.17
November	.20	.14½	.15	.15
December	.20	.20	.15	.15
Year	.23	.13	.22	.15

Henbane

April 2, 1878, the price of powder was 22c.; October 18, 1881, whole, 12c. to 14c.; 1891, 10c.; 1901, 9c. to 12c.; 1911, 9c. to 10c.; 1913, 6½c. to 7c.; 1918, $2.10.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.24	$0.24	$0.19	$0.19
February	.24	.24	.22	.19
March	.24	.23	.22	.22
April	.23	.20	.22	.22
May	.21	.21	.35	.22
June	.21	.21	.35	.35
July	.21	.21	.35	.35
August	.21	.20	.35	.24
September	.20	.20	.24	.23
October	.20	.20	.23	.21
November	.20	.20	.21	.21
December	.20	.19	.21	.21
Year	.24	.19	.35	.19

Laurel, Italian

April 2, 1878, the price of ground was 10c.; October 18, 1881, whole, 3c. to 5c.; 1891, 3½c. to 4c.; 1901, 3c. to 4c.; 1911, 3¼c. to 3½c.; 1913, 3½c. to 3¾c.; 1918, April 16c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04¾	$0.04¾	$0.04½	$0.04¼
February	.04½	.04½	.04½	.04½
March	.04½	.04½	.04¾	.04½
April	.04½	.04½	.04¾	.04¾
May	.04½	.04½	.05	.04½
June	.04½	.04½	.05¼	.05¼
July	.04½	.04¼	.05¼	.05
August	.04½	.04¼	.05	.04¾
September	.04¼	.04¼	.04¾	.04¾
October	.04¼	.04¼	.04½	.04½
November	.04¼	.04¼	.04½	.04½
December	.04¼	.04¼	.04½	.04½
Year	.04¾	.04¼	.05¼	.04¼

Pennyroyal

December 20, 1897, the price was 8½c.; October 18, 1901, 6½c.; 1911, 4c. to 5c.; 1913, 4c. to 5c.; 1918, January, 18c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.08	$0.08	$0.08
February	.08	.08	.07	.07
March	.08	.08	.07	.07
April	.08	.08	.07	.07
May	.08	.08	.07	.07
June	.08	.08	.07	.07
July	.08	.08	.07	.07
August	.08	.08	.07	.07
September	.08	.08	.07	.07
October	.08	.08	.07	.07
November	.08	.08	.08	.07
December	.08	.08	.08	.08
December	.08	.08	.08	.08

Prince's Pine

October 18, 1871, the price was 3½c. to 4c.; 1881, 8c. to 9c.; 1891, 8c.; 1901, 8c.; 1911, 8c. to 10c.; 1913, 8c. to 10c.; 1918, October, 50c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.16	$0.16	$0.14	$0.14
February	.16	.15	.12½	.12½
March	.16	.15	.12½	.12½
April	.15	.15	.12½	.12½
May	.15	.15	.12½	.12½
June	.15	.14	.12½	.12½
July	.14½	.14	.12½	.12½
August	.14	.14	.12½	.12
September	.14	.14	.14	.12
October	.14	.14	.15	.15
November	.14	.14	.15	.15
December	.14	.14	.15	.15
Year	.16	.14	.15	.12

Sage, Greek

March 26, 1873, the price was 3½c. to 4c.; October 18, 1881, Italian, 2¼c. to 2½c.; 1891, Italian, 5½c. to 8c.; 1901, Italian, 3¾c. to 3¾c.; 1911, Italian, 3¼c. to 4c.; 1913, Greek, 3c. to 4c.; 1918, November, 36c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.02¾	$0.02¾	$0.03	$0.03
February	.02¾	.02¾	.03	.03
March	.02¾	.02¾	.03	.03
April	.02¾	.02¾	No stocks.	
May	.02¾	.02¾	No stocks.	
June	.02¾	.02¾	No stocks.	
July	.03	.02¾	No stocks.	
August	.03	.02¾	No stocks.	
September	.02¾	.02¾	No stocks.	
October	.02¾	.02¾	No stocks.	
November	.03	.02¾	.03½	.03½
December	.03	.03	.03½	.03½
Year	.03	.02¾	.03½	.03

Senna, Tinnevelly

October 18, 1871, the price was 16c.; 1881, 11c. to 15c.; 1891, 5c. to 18c.; 1901, 6¼c. to 14c.; 1911, 6c. to 12c.; 1913, 7c. to 9c.; 1919, November, 17c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07	$0.07	$0.07½	$0.07½
February	.07	.07	.07½	.07½
March	.07	.07	.07½	.07½
April	.07½	.07½	.07½	.07½
May	.07½	.07½	.07½	.07½
June	.07½	.07½	.07½	.07½
July	.07½	.07½	.07½	.07½
August	.07½	.07½	.07½	.07½
September	.07½	.07½	.07½	.07½
October	.07½	.07½	.07½	.07½
November	.07½	.07½	.07½	.07½
December	.07½	.07½	.07½	.07½
Year	.07½	.07	.07½	.07½

Stramonium

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13	$0.13	$0.17	$0.16
February	.13	.13	.18	.17
March	.13	.13	.19	.19
April	.13	.13	.19	.17
May	.14	.13	.17	.16
June	.15	.14½	.16	.16
July	.16	.15	.16	.16
August	.16	.15	.16	.16
September	.14½	.14	.16	.16
October	.14	.13½	.19	.16
November	.14	.14	.19½	.19
December	.16	.14	.19¼	.18
Year	.16	.13	.19½	.16

Uva Ursi

May 29, 1872, the price was 6c. to 7c.; October 18, 1881, 4c. to 5½c.; 1891, 5c. to 7c.; 1901, 3½c. to 5c.; 1911, 3¾c. to 4c.; 1913, 3½c. to 4c.; 1918, May 24c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04¾	$0.04¾	$0.05	$0.05
February	.04¾	.04¾	.05	.05
March	.04¾	.04¾	.05	.05
April	.04¾	.04¾	.05¼	.05
May	.04¾	.04½	.05½	.05½
June	.04½	.04½	.05½	.05½
July	.04¾	.04¾	.05½	.05½
August	.04¾	.04¾	.05½	.05½
September	.04¾	.04¾	.05½	.05½
October	.04¾	.04¾	.05½	.05½
November	.05	.04¾	.05½	.05½
December	.05	.05	.05½	.05½
Year	.05	.04½	.05½	.05

Miscellaneous

Balm of Gilead

December 20, 1890, the price was 35c.; October 18, 1901, 32c.; 1911, 25c. to 26c.; 1913, 24c. to 26c.; 1919, March, $3.60.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.40	$0.40	$0.38	$0.37
February	.40	.40	.38	.38
March	.40	.40	.38	.38
April	.40	.40	.38	.38
May	.40	.40	.38	.38
June	.37	.37	.38	.37
July	.37	.37	.35	.35
August	.37	.37	.35	.35
September	.37	.37	.35	.35
October	.37	.37	.35	.35
November	.37	.37	.35	.35
December	.37	.37	.35	.35
Year	.40	.37	.38	.35

Ergot

November 22, 1871, the price was 80c.; October 18, 1881, 60c. to 65c.; 1891, 38c. to 43c.; 1901, 42c. to 45c.; 1911, $1.25 to $1.30; 1913, $1.25 to $1.30; 1919, December, $5.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.75	$0.74	$1.25	$1.20
February	.90	.74	1.23	1.10
March	1.25	1.10	1.10	1.05
April	1.20	1.12	1.10	1.05
May	1.12	1.10	1.08	.95
June	1.10	.90	.90	.90
July	.90	.90	.80	.80
August	1.10	.92	1.40	.85
September	1.10	1.05	1.60	1.40
October	1.70	1.20	1.60	1.45
November	1.40	1.30	1.45	1.40
December	1.25	1.25	1.45	1.45
Year	1.70	.44	1.60	.80

Lycopodium

February 25, 1874, the price was 70c.; October 18, 1881, 32c. to 34c.; 1891, 33c. to 36c.; 1901, 52c. to 54c.; 1911, 48c. to 50c.; 1913, 42c. to 44c.; 1921, February, $4.75.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.85	$0.82	$0.85	$0.83
February	.88	.88	.83	.80
March	.95	.90	.83	.83
April	.95	.95	.83	.80
May	.95	.95	.80	.80
June	.95	.95	.80	.80
July	.95	.95	.80	.80
August	.97	.95	.80	.70
September	.95	.95	.72	.70
October	1.00	1.00	.72	.72
November	.85	.85	.73	.72
December	.85	.85	.73	.73
Year	1.00	.82	.85	.70

Manna, Flake

October 18, 1871, the price on large flake was $1.40; small flake, 83c. to 85c.; 1881, large flake, 95c. to $1; small flake, 38c. to 40c.; 1891, large flake, 75c. to 80c.; small flake, 30c. to 35c.; 1901, large flake, 80c. to $1; small flake, 30c. to 35c.; 1911, large flake, $1; small flake, 75c. to 80c.; 1913, large flake, 85c. to 90c.; small flake, 55c. to 57c.; 1919, large, April, $1.30; small, October, 1916, $1.05.

1926

	Per pound			
	Large.		Small.	
	H.	L.	H.	L.
January	$0.62	$0.58	$0.44	$0.44
February	.58	.58	.50	.44
March	.58	.54	.54	.52
April	.58	.56	.54	.42
May	.56	.54	.42	.40
June	.54	.53	.40	.40
July	.53	.53	.40	.40
August	.50	.50	.40	.40
September	.50	.48	.40	.38
October	.48	.48	.38	.37
November	.55	.48	.40	.37
December	.55	.50	.40	.40
Year	.62	.48	.54	.37

1927

	Per pound			
	Large.		Small.	
	H.	L.	H.	L.
January	$0.52	$0.50	$0.40	$0.40
February	.53	.52	.40	.40
March	.53	.53	.40	.40
April	.53	.53	.40	.40
May	.65	.53	.46	.40
June	.65	.62	.50	.45
July	.65	.65	.55	.50
August	.75	.70	.60	.55
September	.85	.78	.65	.60
October	.85	.70	.65	.60
November	.70	.65	.60	.55
December	.65	.65	.55	.55
Year	.85	.50	.65	.40

Nux Vomica, Buttons

November 22, 1871, the price for powder was 18c. to 21c.; October 18, 1881, 2½c.; 1891, 3¼c. to 4½c.; 1901, 2¾c. to 3c.; 1911, 2½c. to 3c.; 1913, 2¾c. to 3c.; 1920, June, 18c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05½	$0.05½	$0.05¼	$0.05¼
February	.05½	.05½	.05¼	.05¼
March	.05½	.05½	.05¼	.05¼
April	.05½	.05½	.05¼	.05¼
May	.05½	.05½	.05¼	.05¼
June	.05½	.05½	.05¼	.05¼
July	.05½	.05½	.05¼	.05¼
August	.05½	.05½	.05¼	.05¼
September	.05½	.05½	.05¼	.05¼
October	.05½	.05½	.05¼	.05¼
November	.05¼	.05¼	.05¼	.05
December	.05¼	.05¼	.05	.05
Year	.05½	.05¼	.05¼	.05

Roots

Aconite, U.S.P.

February 23, 1874, the price was 14c.; October 18, 1881, 10c. to 12c.; 1891, 13c. to 15c.; 1901, 13c. to 14c.; 1911, 10½c. to 11c.; 1913, 13c. to 15c.; 1919, December, 90c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.26	$0.23	$0.23	$0.22
February	.23	.23	.24	.24
March	.23	.23	.24	.23
April	.23	.23	.23	.23
May	.22	.22	.23	.22½
June	.22	.21	.22½	.22½
July	.21	.21	.24	.22½
August	.21	.20	.24	.23
September	.20	.20	.23	.23
October	.20	.20	.23	.23
November	.22	.20	.23	.23
December	.22	.22	.23	.23
Year	.26	.20	.24	.22

Aletris

January 12, 1881, the price was 35c. to 40c.; October 18, 1881, 35c. to 40c.; 1901, 16c.; 1911, 20c. to 22c.; 1913, 20c. to 21c.; 1920, March, $1.25.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.40	$0.37	$0.44	$0.44
February	.40	.40	.44	.42
March	.40	.39	.42	.42
April	.38	.37	.42	.42
May	.36	.36	.42	.38
June	.40	.36	.38	.37
July	.40	.40	.37	.37
August	.40	.40	.40	.38
September	.42	.42	.40	.40
October	.42	.42	.40	.40
November	.44	.42	.40	.40
December	.44	.44	.40	.40
Year	.44	.36	.44	.37

Belladonna

December 22, 1875, the price was 18c.; October 18, 1881, 10c. to 12c.; 1891, 6c. to 12c.; 1901, 5c. to 11c.; 1911, 10½c. to 11c.; 1913, 9c. to 10c.; 1917, December, $4.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15½	$0.15	$0.18	$0.17
February	.17	.16	.18	.17
March	.17	.16	.18½	.18
April	.17	.16	.19	.18
May	.18	.16	.19	.19
June	.18	.16½	.19	.19
July	.18	.18	.19	.18½
August	.18	.18	.18	.18
September	.18	.18	.19½	.18
October	.18	.18	.19½	.19½
November	.18	.17	.19½	.19
December	.17	.16	.19	.19
Year	.18	.15	.19½	.17

Blood

April 28, 1875, the price of crushed was 10c.; October 18, 1881, 6c. to 6½c.; 1891, 4½c. to 6c.; 1901, 5c. to 6c.; 1911, 8c. to 8½c.; 1913, 8½c. to 9c.; 1918, November, 80c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13	$0.13	$0.13½	$0.13
February	.13½	.13	.13½	.13½
March	.13	.13	.13½	.13½
April	.13	.13	.13½	.13½
May	.13	.13	.13½	.13½
June	.13	.13	.13½	.13½
July	.13	.13	.13½	.13½
August	.13	.13	.15	.13½
September	.13	.13	.16	.15
October	.13	.13	.16	.16
November	.13	.13	.21	.18
December	.13	.13	.21	.21
Year	.13½	.13	.21	.13

Colombo

November 22, 1871, the price was 13c. to 14c.; October 18, 1881, 9½c. to 10c.; 1891, 5c. to 10c.; 1901, 8c. to 12c.; 1911, 8c. to 10c.; 1913, 6c. to 7c.; 1918, September, 30c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.03½	$0.03½
February	.04	.04	.05	.05
March	.04	.04	.05	.05
April	.04	.04	.05	.05
May	.03½	.03½	.05	.05
June	.03½	.03½	.05	.05
July	.03½	.03½	.05	.05
August	.03½	.03½	.05	.05
September	.03½	.03½	.05	.05
October	.03½	.03½	.05	.05
November	.03½	.03½	.05	.05
December	.03½	.03½	.05	.05
Year	.04	.03½	.05	.03½

Gentian

November 22, 1871, the price was 5½c. to 6c.; October 18, 1881, 4½c. to 4¾c.; 1891, 3¾c. to 4½c.; 1901, 4c. to 4¼c.; 1911, 6c. to 6½c.; 1913, 6½c. to 6¾c.; 1918, November, 18c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07½	$0.07½	$0.08	$0.06¾
February	.07½	.07½	.08½	.08
March	.07	.07	.08½	.08½
April	.07	.06¾	.08½	.08½
May	.06¾	.06¾	.08½	.08½
June	.06¾	.06½	.08½	.08½
July	.06½	.06½	.08½	.08½
August	.06½	.06½	.08	.08
September	.06½	.06½	.09	.08
October	.06½	.06½	.09	.09
November	.06½	.06½	.09	.09
December	.06¾	.06¾	.09	.09
Year	.07½	.06½	.09	.06¾

Golden Seal

February 25, 1874, the price was 14c.; October 18, 1881, 15c. to 16c.; 1891, 24c. to 26c.; 1901, 55c. to 60c.; 1911, $5.25 to $5.50; 1913, $4.90 to $5; 1917, April, $5.75.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$4.80	$4.50	$4.75	$4.75
February	5.30	4.80	4.75	4.75
March	5.60	5.30	4.75	4.70
April	5.70	5.60	4.70	4.65
May	5.60	5.45	4.65	4.65
June	5.45	5.45	4.65	4.60
July	5.45	5.10	4.60	4.55
August	5.10	5.10	4.55	4.50
September	5.10	5.10	4.50	4.50
October	5.00	5.00	4.50	4.50
November	5.00	5.00	4.50	4.25
December	4.90	4.75	4.25	3.75
Year	5.70	4.50	4.75	3.75

Sixteen Years' Prices

	Per pound	
	H.	L.
1927	$4.75	$3.75
1926	5.70	4.50
1925	5.00	3.55
1924	3.70	3.40
1923	3.65	3.20
1922	3.60	3.00
1921	5.00	3.10
1920	6.50	4.85
1919	6.00	5.25
1918	5.35	4.90
1917	5.75	5.00
1916	5.50	4.25
1915	4.85	4.20
1914	4.90	4.20
1913	5.00	3.90
1912	5.25	4.00

Hellebore, White, Powdered

May 28, 1875, the price was 15c.; October 18, 1881, whole, 6c. to 7c.; 1891, 8c. to 12c.; 1901, 7c. to 7½c.; 1911, 7½c. to 8c.; 1913, 10c. to 11c.; 1918, February, 24c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.11	$0.10	$0.09½	$0.09½
February	.10	.10	.09½	.09½
March	.10	.10	.09½	.09½
April	.10	.10	.09½	.09½
May	.10	.10	.09½	.09½
June	.10	.10	.12	.09½
July	.10	.09½	.13	.12
August	.09½	.09½	.13	.12
September	.09½	.09½	.12	.12
October	.09½	.09½	.12	.12
November	.09½	.09½	.12	.12
December	.09½	.09½	.12	.12
Year	.11	.09½	.13	.09½

Ipecac, Cartagena

October 18, 1871, the price of Rio was $1.27½; 1881, $1.10 to $1.15; 1891, $2 to $2.15; 1901, $2.70 to $2.80; 1911, $2.25 to $2.30; 1913, $2.10; 1918, November, $4.75.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.30	$3.00	$3.60	$3.25
February	3.30	3.25	3.60	3.25
March	3.30	3.00	3.10	3.10
April	3.00	3.00	3.10	3.10
May	3.40	3.00	3.10	3.10
June	4.00	3.40	3.10	3.00
July	No stocks		3.00	2.75
August	4.50	4.50	2.75	2.75
September	4.00	3.95	2.75	2.75
October	3.80	3.00	3.25	2.75
November	3.50	3.40	3.25	3.25
December	3.40	3.35	3.45	3.45
Year	4.50	3.00	3.60	2.75

Ipecac, Rio

October 18, 1871, the price of Rio was $1.27½; 1881, $1.10 to $1.15; 1891, $2 to $2.15; 1901, $2.70 to $2.80; 1911, $2.25 to $2.30; 1913, $2.10; 1918, November, $4.75.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.30	$3.30	$3.60	$3.35
February	3.30	3.25	3.60	3.60
March	3.30	3.60	3.65	3.60
April	3.60	3.00	3.60	3.60
May	3.40	3.00	3.60	3.60
June	4.00	3.40	No stocks	
July	No stocks		3.10	3.10
August	4.50	4.50	3.00	2.85
September	4.00	3.95	3.00	2.85
October	3.80	3.60	3.45	3.00
November	3.50	3.40	3.45	3.45
December	3.40	3.35	3.45	3.45
Year	4.50	3.00	3.60	2.85

Rio, Seventeen Years' Prices

	Per pound	
	H.	L.
1927	$3.60	$3.10
1926	4.50	3.00
1925	2.35	1.95
1924	2.35	1.80
1923	2.00	1.55
1922	1.90	1.35
1921	2.50	1.35
1920	3.50	2.50
1919	4.00	2.50
1918	4.75	3.00
1917	3.10	2.00
1916	2.65	2.55
1915	5.50	1.70
1914	2.00	1.42½
1913	2.20	1.75
1912	2.35	1.45
1911	2.30	1.75

Jalap

October 18, 1871, the price was 40c.; 1881, 18c. to 20c.; 1891, 50c. to 52½c.; 1901, 12c. to 14c.; 1911, 33c. to 35c.; 1913, 15c. to 16c.; 1919, August, 80c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.24	$0.24	$0.20	$0.20
February	.24	.24	.18	.18
March	.23	.23	.18	.18
April	.23	.23	.18	.18
May	.23	.23	.18	.18
June	.23	.23	.17	.16
July	.23	.23	.16	.16
August	.23	.23	.16	.16
September	.23	.23	.16	.16
October	.21	.20	.16	.15
November	.20	.20	.15	.15
December	.20	.20	.15	.15
Year	.24	.20	.20	.15

Seventeen Years' Prices

	Per pound	
	H.	L.
1927	$0.20	$0.15
1926	.24	.20
1925	.29	.25
1924	.38	.29
1923	.34	.30
1922	.34	.13
1921	.35	.13
1920	.80	.35
1919	.80	.50
1918	.62	.47
1917	.50	.12
1916	.12	.08¾
1915	.10	.08
1914	.20	.10
1913	.23	.18
1912	.26	.22
1911	.40	.26

Licorice

November 22, 1871, the price was 8c.; October 18, 1881, 5c. to 6c.; 1891, 3½c. to 5c.; 1901, 3¼c. to 4c.; 1911, 4c. to 4½c.; 1913, 4½c. to 5½c.; 1918, May, 34c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05½	$.005½	$0.05½	$0.05½
February	.05½	.05½	.05½	.05½
March	.05½	.05½	.05½	.05½
April	.05½	.05½	.05½	.05½
May	.05½	.05½	.05½	.05½
June	.05½	.05½	.05½	.05½
July	.05½	.05½	.05½	.05½
August	.05½	.05½	.05½	.05½
September	.05½	.05½	.05½	.05½
October	.05½	.05½	.05½	.05½
November	.05½	.05½	.05½	.05½
December	.05½	.05½	.05½	.05½
Year	.05½	.05½	.05½	.05½

Mandrake

April 14, 1875, the price was 5c. to 7c.; October 18, 1881, 5c. to 6c.; 1891, 3¾c. to 4¼c.; 1901, 4c. to 5c.; 1911, 6c. to 6½c.; 1913, 7c. to 7½c.; 1920, February, 42c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.12	$0.12	$0.12	$0.12
February	.12	.12	.12	.12
March	.12	.11	.12	.12
April	.11	.11	.12	.12
May	.11	.11	.12	.12
June	.11	.11	.12	.12
July	.11	.11	.13	.12
August	.12	.12	.14	.13
September	.12	.12	.14	.13
October	.12	.12	.14	.14
November	.12	.12	.14	.14
December	.12	.12	.15	.14
Year	.12	.11	.15	.12

Orris, Florentine

November 22, 1871, the price was 15c. to 16c.; October 18, 1881, 15c. to 19c.; 1891, 35c. to 40c.; 1901, 9c. to 11¼c.; 1911, 9¼c. to 10c.; 1913, 15½c. to 16½c.; 1918, October, 29c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.09	$0.09	$0.09
February	.09	.09	.09	.09
March	.08½	.08½	.09	.09
April	.08½	.08½	.09	.09
May	.08½	.08½	.09	.08½
June	.08½	.08½	.08½	.08½
July	.08½	.08½	.08½	.08½
August	.08½	.08½	.08½	.08½
September	.08½	.08½	.08½	.08½
October	.08½	.08½	.08½	.08½
November	.09	.08½	.09½	.09½
December	.09	.09	.09½	.09¼
Year	.09	.08½	.09½	.08½

Orris, Verona

January 17, 1872, the price was 14c.; October 18, 1881, 8c. to 10c.; 1891, 14c. to 17c.; 1901, 4c. to 6c.; 1911, 9c. to 9½c.; 1913, 13½c. to 14½c.; 1918, November, 28c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07½	$0.07½	$0.08	$0.08
February	.07½	.07½	.08	.08
March	.07½	.07½	.08	.08
April	.07½	.07½	.08	.08
May	.07½	.07½	.08¾	.08
June	.07½	.07½	.08	.08
July	.07½	.07½	.08	.08
August	.07½	.07½	.08	.08
September	.07½	.07½	.08	.08
October	.07½	.07½	.08½	.08½
November	.08	.07½	.08½	.08½
December	.08	.08	.08½	.08½
Year	.08	.07½	.08½	.08

Rhubarb, High Dried

October 18, 1871, the price was 55c.; 1881, 18c. to $1; 1890, 30c. to 70c.; 1901, 17½c. to 25c.; 1911, 16c. to 17c.; 1913, 16c. to 17c.; 1919, December, $1.90.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.34	$0.33	$0.55	$0.55
February	.35	.33	.52	.50
March	.35	.35	.50	.45
April	.35	.35	.51	.47
May	.45	.37	.53	.53
June	.45	.45	.53	.46½
July	.50	.45	.46½	.46½
August	.60	.50	.46½	.45
September	.65	.60	.45	.42
October	.65	.55	.42	.40
November	.55	.55	.43	.40
December	.55	.55	.43	.35
Year	.65	.33	.55	.35

Sarsaparilla, Mexican

October 18, 1871, the price was 17c.; 1881, 9¾c. to 10½c.; 1891 14c. to 15c.; 1901, 7c. to 7¼c.; 1911, 16c.; 1913, 18c. to 19c.; 1918, March, 70c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.35	$0.30	$0.40	$0.40
February	No stocks		.40	.40
March	No stocks		.36	.36
April	No stocks		.36	.34
May	No stocks		.34	.31
June	No stocks		.30	.30
July	.42	.40	.30	.26
August	.40	.40	.26	.25
September	.40	.40	.25	.25
October	.40	.40	.25	.25
November	.45	.42	.25	.22
December	.40	.40	.21	.21
Year	.45	.30	.40	.21

Eighteen Years' Prices

	Per pound	
	H.	L.
1927	$0.40	$0.21
1926	.45	.30
1925	.35	.19
1924	.30	.18
1923	.35	.22
1922	.45	.23
1921	.43	.38
1920	.47	.36
1919	.55	.30
1918	.70	.32
1917	.60	.13½
1916	.13	.10½
1915	.15	.09
1914	.50	.10
1913	.28	.14
1912	.19	.11
1911	.18½	.09
1910	.11	.08¾

Senega

October 18, 1871, the price was $1.60; 1881, 57½c. to 60c.; 1891, 40c.; 1901, 67c.; 1911, 55c. to 57½c.; 1913, 66c. to 68c.; 1920, January, $2.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.68	$0.68	$0.75	$0.72
February	.67	.67	.80	.75
March	.67	.67	.80	.80
April	.64	.62	.83	.80
May	.62	.58	.83	.83
June	.60	.60	.83	.80
July	.63	.60	1.10	.80
August	.72	.65	1.15	1.10
September	.70	.70	1.25	1.20
October	.73	.71	1.27	1.25
November	.75	.73	1.28	1.27
December	.75	.72	1.27	1.27
Year	.75	.58	1.28	.72

Eighteen Years' Prices

	Per pound	
	H.	L.
1927	$1.28	$0.72
1926	.75	.58
1925	.68	.50
1924	.65	.53
1923	.75	.60
1922	1.10	.74
1921	.90	.60
1920	2.50	.90
1919	2.40	.90
1918	1.05	.80
1917	.85	.60
1916	.68	.40
1915	.45	.35
1914	.50	.38
1913	.80	.63
1912	.65	.59
1911	.60	.42
1910	.99	.43

Squills, White

November 22, 1871, the price was 6c. to 6½c.; October 18, 1881, 6c. to 7c.; 1891, 5½c. to 7½c.; 1901, 3¾cc. to 4c.; 1911, 3¾c. to 5c.; 1913, 6c. to 8c.; 1918, November, 16c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05	$0.05	$0.05½	$0.05
February	.05	.05	.05½	.05½
March	.05	.05	.05½	.05½
April	.05	.05	.05½	.05½
May	.05	.05	.05½	.05½
June	.05	.05	.05½	.05½
July	.05	.05	.05½	.05½
August	.05	.05	.05½	.05½
September	.05	.05	.05½	.04½
October	.05	.05	.04½	.04½
November	.05	.05	.07½	.04½
December	.05	.05	.07½	.07¼
Year	.05	.05	.07½	.04½

Valerian, Belgian

November 22, 1871, the price was 20c. to 35c.; October 18, 1881, German 12. to 13½c.; 1891, 7½c. to 8c.; 1901, 5½c. to 6c.; 1911, 13c. to 13½c.; 1913, 9½c. to 10c.; 1919, January, $1.65.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.25	$0.23	$0.27	$0.27
February	.42	.30	.30	.30
March	.50	.45	.28	.28
April	.50	.48	.28	.28
May	.75	.50	.28	.27
June	.90	.75	.25	.21
July	.90	.90	.21	.21
August	1.00	.60	.21	.20
September	.90	.90	.21	.20
October	.90	.80	.21	.21
November	.80	.40	.21	.18
December	.25	.20	.18	.17
Year	1.00	.20	.30	.17

Seeds

Anise, Spanish

November 22, 1871, the price of German was 14c.; October 18, 1881, 9c. to 10c.; 1894, German, 5½c. to 7c.; 1901, Russian, 5½c. to 6c.; 1911, Spanish, 8¼c. to 9c.; 1913, 8½c. to 9½c.; 1917, February, 30c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13½	$0.13	$0.13	$0.13
February	.13	.12¾	.13¼	.13¼
March	.12¾	.12¾	.15	.13¼
April	.12¾	.12¾	.16	.15
May	.12¾	.12½	.15½	.14¾
June	.12½	.12½	.15	.15
July	.13	.12¾	.15	.14¾
August	.13	.12¾	.14¾	.14¼
September	.14½	.13½	.14½	.14
October	.13¼	.13	.14	.14
November	.13	.13	.14	.14
December	.13	.13	.14½	.14
Year	.14½	.12½	.16	.13

Canary, Argentine

June 12, 1871, the price of Spanish seed was 3½c.; October 18, 1881, 4c. to 4¼c.; 1891, 2½c. to 2¾c.; 1901, Smyrna, 2¾c. to 2½c.; 1911, Smyrna, 3¼c. to 3¾c.; 1913, Smyrna, 5½c. to 5¾c.; 1918, September, Spanish, 25c.; 1920, nominal; 1921, nominal. On May 28, 1906, the price of South American seed was 4c.; October 18, 1911, 3¼c. to 3¾c.; 1913, 5½c. to 5¾c.; 1918, September, 25c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06½	$0.06¼	$0.04½	$0.04½
February	.06¼	.05¾	.04¾	.04½
March	.05¾	.05¼	.04¾	.04¾
April	.05¼	.05	.04¾	.04½
May	.05	.04¾	.04½	.04
June	.04¾	.04½	.04½	.04¼
July	.04½	.04½	.04½	.04½
August	.04½	.04½	.04½	.04½
September	.04½	.04½	.04½	.04½
October	.04¾	.04¾	.04¾	.04¾
November	.04¾	.04½	.04¾	.04¾
December	.04½	.04½	.04¼	.04¼
Year	.06½	.04½	.04¾	.04

Caraway, Dutch

October 18, 1871, the price was 11½c.; 1881, Dutch, 6¾c. to 7c.; 1891, 5c. to 5¼c.; 1901, Dutch, 5½c. to 6c.; 1911, Dutch, 6½c. to 7c.; 1913, 7c. to 7½c.; 1918, November, 69c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.07	$0.06¾	$0.10½	$0.09¾
February	.06¾	.06½	.09¾	.09¾
March	.06¼	.06	.09¼	.08½
April	.06½	.06¼	.09½	.08½
May	.06¾	.06¾	.09¼	.08½
June	.06¾	.06½	.09½	.09¼
July	.07¼	.06½	.09	.08¼
August	.09¾	.07¾	.08½	.08¼
September	.09½	.09¼	.08¾	.08
October	.09¾	.09½	.09¾	.09¼
November	.11	.10¼	.09½	.09
December	.10¾	.10½	.09¼	.09¼
Year	.11	.06	.10¼	.08

Seventeen Years' Prices

	Per pound	
	H.	L.
1927	$0.10¼	$0.08
1926	.11	.06
1925	.10¼	.06½
1924	.24	.09½
1923	.28½	.16½
1922	.13	.07½
1921	.09	.06¼
1920	.12	.09
1919	.52	.52
1918	.69	.52
1917	.65	.52
1916	.51	.10¾
1915	.13½	.08½
1914	.15	.07
1913	.07¼	.05¾
1912	.08	.05½
1911	.06½	.05

Cardamom, Bleached

October 18, 1871, the price was $2.80 to $2.85; 1881, $2 to $2.25; 1891, 60c. to 80c.; 1901, 55c. to 85c.; 1911, 62c. to $1.25; 1913, $1.25 to $1.75; 1919, December, $2.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.40	$2.40	$2.00	$2.00
February	2.40	2.40	2.00	1.75
March	2.40	2.40	1.75	1.75
April	2.40	2.40	1.75	1.60
May	2.40	2.40	1.60	1.60
June	2.40	2.40	1.60	1.50
July	2.40	2.40	1.50	1.45
August	2.40	2.40	1.45	1.45
September	2.40	2.40	1.45	1.45
October	2.40	2.40	1.40	1.40
November	2.40	2.00	1.40	1.40
December	2.00	2.00	1.40	1.40
Year	2.40	2.00	2.00	1.40

Celery

October 7, 1879, the price was 15c. to 16c.; October 18, 1881, 12½c. to 14c.; 1891, 17c.; 1901, 7½c. to 8c.; 1911, 20c. to 23c.; 1913, 12c. to 13c.; 1918, October, 70c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.23½	$0.22½	$0.19¾	$0.19½
February	.22	.21½	.20¼	.20
March	.22	.21¼	.20	.20
April	.21¾	.20¼	.20½	.19½
May	.20	.19	.19½	.18¾
June	.19	.18½	.19½	.19½
July	.19	.18¼	.20¼	.19¾
August	.18¼	.17	.20½	.20¼
September	.16½	.16	.20¼	.19½
October	.15¾	.15½	.19¼	.18½
November	.17½	.15½	.18	.17½
December	.18¾	.18	.16¼	.16
Year	.23½	.15½	.20½	.16

Sixteen Years' Prices

	Per pound	
	H.	L.
1927	$0.20½	$0.16
1926	.23½	.15½
1925	.35½	.24
1924	.33	.24½
1923	.30	.19¼
1922	.23½	.13
1921	.15	.12
1920	.32	.15
1919	.55	.32
1918	.70	.26½
1917	.30	.18
1916	.30	.18¼
1915	.35	.14
1914	.40	.14
1913	.45	.12
1912	.30	.15

Coriander, Bleached

October 18, 1871, the price was 9c.; 1881, 5c. to 6c.; 1891, 3c. to 4c.; 1901, 3c. to 3½c.; 1911, 3¾c. to 4c.; 1913, 6¼c. to 6½c.; 1917, June, 25½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.08	$0.09	$0.09
February	.08	.08	.13½	.09½
March	.08	.08	.15½	.15½
April	.08	.07½	.16	.15½
May	.07½	.07½	.15½	.15
June	.07½	.07½	.15	.15
July	.07½	.07½	.16	.15
August	.08	.08	.17	.16
September	.08	.08	.16	.16
October	.07½	.07½	.16	.15½
November	.09	.07½	.15½	.15½
December	.09	.09	.16	.15½
Year	.09	.07½	.17	.09

Fenugreek

November 22, 1871, the price for powdered seed was 6c. to 7c.; October 18, 1881, whole seed, 3½c. to 4c.; 1891, 2½c. to 2¾c.; 1901, 1¾c. to 2c.; 1911, 2½c. to 2¾c.; 1913, 3c. to 3½c.; 1918, May, 15c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05	$0.05	$0.05	$0.05
February	.05	.04¾	.05	.04½
March	.04¾	.04¾	.04½	.04½
April	.4.4¾	.04¾	.04½	.04½
May	.04½	.04½	.05	.04½
June	.04¾	.04¾	.05	.05
July	.04¼	.04¼	.05	.05
August	.04¼	.03½	.05	.05
September	.03½	.03½	.05	.04½
October	.03½	.03½	.04½	.04½
November	.04	.03½	.05	.05
December	.05	.04¾	.05	.05
Year	.05	.03½	.05	.04½

Mustard, California, Brown

October 18, 1871, the price was 13c. to 15c.; 1881, 6c.; 1891, 4¾c. to 5c.; 1901, 4½c. to 5c.; 1911, 6¼c. to 6½c.; 1913, 4¾c. to 5c.; 1918, November, 31c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10¼	$0.10¼	$0.08¾	$0.08¾
February	.10¼	.09¾	.08¾	.08½
March	.09¾	.09½	.08½	.08¾
April	.09½	.09½	.08¾	.08
May	.09¼	.09½	.08	.07¼
June	.09	.09	.07½	.07½
July	.09¼	.09¼	.07½	.07½
August	.09	.09	.07½	.07½
September	.08¾	.08¾	.07½	.07½
October	.08¾	.08¾	.07½	.07½
November	.08¾	.08¾	.07½	.07¼
December	.08¾	.08¾	.07¼	.07¼
Year	.10¼	.08¾	.08¾	.07¼

Stramonium

April 2, 1878, the price of powder was 18c. to 20c.; October 18, 1881, whole, 8c. to 9c.; 1901, 9c.; 1911, 8c. to 8½c.; 1913, 8c. to 8½c.; 1918, June, 45c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.08	$0.07½	$0.07½
February	.08	.08	.07½	.07½
March	.08	.08	.07½	.07½
April	.08	.08	.07½	.07½
May	.10	.10	.07½	.07½
June	.10	.10	.07½	.07½
July	.10	.10	.07½	.07½
August	.10	.10	.07½	.07½
September	.10	.10	.07½	.07½
October	.10	.10	.07½	.07½
November	.10	.10	.07½	.07½
December	.10	.07½	.07½	.07½
Year	.10	.07½	.07½	.07½

Worm, American

April 2, 1878, the price of powder was 12c. to 15c.; October 18, 1881, whole, 5c. to 6c.; 1901, 9½c. to 10c.; 1911, 6c. to 7c.; 1913, 10c. to 11c.; 1920, August, 30c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10	$0.08	$0.17	$0.17
February	.12	.12	.17	.17
March	.18	.12	.17	.17
April	.14	.14	.17	.17
May	.14	.14	.15	.15
June	.14	.14	.15	.15
July	.14	.14	.15	.15
August	.14	.14	.15	.15
September	.20	.14	.15	.15
October	.20	.20	.15	.15
November	.20	.18	.15	.15
December	.17	.17	.15	.15
Year	.20	.08	.17	.15

Spices

Clove, Zanzibar

May 28, 1875, the price for ground was 41c. to 50c.; October 18, 1881, 20c. to 30c.; 1891, 8c. to 8¼c.; 1901, 8c. to 8¼c.; 1911, 16½c. to 17c.; 1913, 16½c. to 16¾c.; 1919, December, 55c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.26¾	$0.26	$0.23	$0.21
February	.25¾	.25½	.20½	.20
March	.25½	.24½	.20	.20
April	.24½	.24	.19¾	.19¼
May	.24	.24	.22	.19½
June	.26	.25½	.22	.21
July	.25½	.24	.21	.20
August	.23½	.22¾	.20	.19¼
September	.23	.22½	.19½	.19
October	.25	.22½	.19½	.18¼
November	.26	.25	.18¼	.18
December	.25	.23	.18	.17¼
Year	.26¾	.22½	.23	.17¼

Twenty-seven Years' Prices

	Per pound	
	H.	L.
1927	$0.23	$0.17¾
1926	.26¾	.22½
1925	.30	.24
1924	.34	.26½
1923	.36	.33
1922	.37	.27
1921	.37½	.16
1920	.50	.34
1919	.55	.19
1918	.49	.43
1917	.55	.19½
1916	.20	.16¼
1915	.21	.15¾
1914	.22	.14¼
1913	.21½	.15
1912	.20½	.10¾
1911	.19	.12
1910	.15¼	.10
1909	.11½	.09½
1908	.12	.10
1907	.18½	.11
1906	.15	.13
1905	.14½	.08½
1904	.19	.13
1903	.10½	.07½
1902	.09	.08
1901	.09½	.07½

Nutmegs, 110s

January 12, 1881, the price of prime to ordinary was 27½c. to 30c.; October 18, 1881, 65c. to 84c.; 1891, 105s to 110s, 60c. to 61c.; 1901, 22½c. to 23c.; 1911, 14¾c. to 15c.; 1913, 14c. to 14¼c.; 1918, August, 39c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0 53	$0.52	$0.38	$0.38
February	.52	.49½	.38	.38
March	.50	.50	.38	.37
April	.50	.48	.37	.37
May	.46	.46	.37	.36
June	.43	.44	.66	.36
July	.44	.44	.36	.36
August	.44	.44	.36	.36
September	.45	.44	.36	.34
October	.45	.43	.34	.33½
November	.42	.38	.33¼	.33½
December	.38	.38	.33½	.33½
Year	.53	.38	.38	.33½

Pepper, Singapore, Black

April 28, 1875, the price of ground was 18c. to 25c.; October 18, 1881, whole, 16½c. to 17c.; 1891, 8½c. to 8¾c.; 1901, 12¾c. to 12¾c.; 1911, 11¾c. to 11½c.; 1913, 11¾c. to 12c.; 1918, May, 28½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.37½	$0.33	$0.26½	$0.26
February	.33	.32	.26	.25
March	.31	.27	.26	.25
April	.26	.24	.26	.26
May	.26	.23	.27½	.24½
June	.26	.26	.31½	.31
July	.26	.26	.35½	.34½
August	.26	.22	.36½	.34
September	.22	.22	.36½	.36½
October	.24½	.23½	.36½	.36
November	.27	.27	.38	.37
December	.27	.26	.37¾	.37
Year	.37½	.22	.38	.24½

Pepper, Lampong

April 28, 1875, the price on ground was 18c. to 25c.; October 18, 1881, whole, 16½c. to 17c.; 1891, 8½c. to 8¾c.; 1901, 12¾c. to 12¾c.; 1911, 11c. to 11¼c.; 1913, 10¾c. to 11c.; 1918, May, 28½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.35	$0.32	$0.26½	$0.25¾
February	.30	.27½	.25	.25
March	.27½	.25	.25	.24¾
April	.24½	.22	.24¾	.24½
May	.25	.21½	.27½	.24
June	.24½	.24	.31	.30
July	.24½	.24	.35½	.34½
August	.23¼	.21	.36½	.34
September	.20	.20	.36½	.36½
October	.23½	.22¼	.36½	.36
November	.27	.27	.38	.37
December	.26	.25	.37¾	.36½
Year	.35	.20	.38	.24

Pepper, Singapore, White

April 28, 1875, the price on powder was 30c. to 36c.; October 18, 1881, whole, 22½c. to 23½c.; 1891, 14¾c. to 15c.; 1901, 19½c. to 19⅝c.; 1911, 16¾c. to 17c.; 1913, 20c. to 20½c.; 1919, August, 34¾c.

	Per pound— 1926.		1927.	
	H.	L.	H.	L.
January	$0.41	$0.38	$0.45	$0.43
February	.36	.35	.42½	.42
March	.35½	.34½	.42	.41
April	.34½	.33	.41	.40
May	.34½	.32	.43½	.39½
June	.36	.34½	.48	.47
July	.36½	.36½	.55	.52
August	.35¾	.34	.54	.53
September	.33½	.33½	.54½	.53½
October	.40	.37½	.55	.54
November	.43	.41	.53½	.52½
December	.47	.45	.52	.51
Year	.47	.32	.55	.39½

Pepper, Chillies, Japan, No. 1

April 28, 1875, the price of ground African was 30c. to 32c.; October 18, 1881, whole, Bombay, 13c. to 14c.; 1891, Bombay, 8½c. to 9c.; 1901, Japan, 10¾c. to 11c.; 1911, 12c. to 12¼c.; 1913, 8¼c. to 8¾c.; 1921, October, 42c.

	Per pound— 1926.		1927.	
	H.	L.	H.	L.
January	$0.17¼	$0.17¼	$0.22½	$0.22
February	.17¾	.14¾	.24	.22½
March	.15	.14	.24½	.24
April	.14¼	.14	.24½	.24½
May	.14¼	.13½	.24½	.23¾
June	.13½	.13½	.28	.25½
July	.13½	.13½	.28	.28
August	.14½	.13½	.28	.27½
September	.16½	.15½	.27½	.27½
October	.16	.15½	.27½	.27½
November	.20	.16	.27½	.27½
December	.21½	.21	.27½	.27½
Year	.21½	.13½	.28	.22

Italian Citrus By-Products Industry

(Continued from page 71)

their interests by uniting and adopting a common policy." The moving spirit in these attempts is reported to be a leading exporter, and the SADA (Societa Anonima Derivati Agrumi). As substantiation for this, it is reported the exporter referred to has been named as some kind of expert counsellor on the board of the Arenella plant. The real objective is said to be some sort of a plan whereby these plants may procure citrate of lime (the raw material) at lower prices than those charged foreign factories, so that they will be able to offer their citric acid at a lower price in the world's market. All this, of course, is trade gossip, and no definite developments as to the above are as yet officially known.

Although there are some fairly modern plants for the manufacture of citrate of lime and the extraction of lemon juice, the more primitive, which represent the great majority, are by far the most interesting to visit. A short ride from Palermo by automobile over a road lined with stone walls to keep intruders from filching lemons from the orchards, brings one to the small village of Bagheria. The plant is easily indicated by gaily decorated lemon carts from the interior, and by lemon skins littering the narrow street. The proprietor, a large man with horse-tail moustaches, true to Sicilian reputation, is most affable and anxious to display his business. His foreman, who is such an "old hand at the game," he seems to have become a veritable part of the enterprise itself, has an intense desire to embellish and enlarge upon his employer's explanations, with the result that diplomatic maneuverings are necessary to prevent the visit from becoming no more than a lively dispute between owner and foreman over the accuracy of each other's dissertations.

Oil Extracting Method

A large room with earthern floor, the roof beams hung with assorted articles, houses the cutters, who, armed with sharp spoon-knives, are seated before large baskets. They display extraordinary speed in cutting a lemon in two, and then, with one movement, flicking the pulp out cleanly from each half into a basket, the skins being tossed into separate baskets. These latter are placed before lemon oil workers, who sit on stools about a foot in height, with pressing pails between their knees. Across the mouth of the pail is tied a stick, to the middle of which is attached a sponge. The worker seizes a lemon skin, presses it with the right amount of force against the sponge; the sponge absorbs the oil; the pressed skin is tossed into a basket. While doing this, he is reaching for another skin, so that scarcely is the first released from pressure over the sponge than another takes its place. When the sponge is full, it is squeezed, the oil it contains running into the pail.

The proprietor and the foreman finally agree that a quintal of lemons (220.5 pounds) will yield from 7 to 9 to 14 English ounces of lemon oil, according to the age of the lemons. When each man's pail is partially filled, he pours its contents into a standard-sized jug, which, when full, he carries to the checking room, where the checker sits at a table crediting each man with the number of jugs turned out. After being checked, the contents of the jug is poured into drums having wide bulging sides with small mouths. After these drums are filled, they are clamped tight shut and allowed to stand a sufficient time to precipitate sediment. The oil is then filtered, after which it is seen to be greenish-yellow in color and to posses a most pleasing fragrance.

Getting the Juice

Having disposed of lemon oil, attention is turned to the pulps. It is explained they are placed under pressure in machines to be described later, almost all the juice being squeezed out to flow by gravity into lower tanks. The residue is collected for cattle and hog feed, it is stated. Lemon juice is reported to contain from 8 to 12 English ounces of citric acid per gallon.

In this factory, current being available, an electric centrifugal pump is used to send the juice into a mixing tank in another room. Here it is heated by steam to as high as 95 degrees centigrade. Slaked lime is then run in until there is a slight excess of the latter. The producer knows when this excess takes place by the change in the color and by long experience. By this means practically all of the citric acid is precipitated as citrate of lime, and the whole lot is then filtered, the precipitate washed and dried ready for delivery.

Two machines for pressing the pulps are shown, the first being the most simple and obsolete is used only when the factory is to run at full capacity. It consists of a round tank in which revolve two heavy rock-hewn rollers attached by arms to a centre axle. The pulps are simply crushed by the revolving rollers and the juice collected in tubs below. The more used and later machine cuts the pulps up, pressing out the juice, the latter along with the chopped up and pressed pulp being ejected into a lattice-work trough, the juice running through the crevices, leaving the pulp to be raked off. The juice flows in a trough across the floor into a collecting tank connected with a centrifugal pump which sends the juice through pipes along the ceiling through the wall into the next room to run into the lime mixing vats.

Manufacturing Capacity and Costs

The producer estimates the capacity of his plant at 250 quintals of lemons a day, for which he pays ordinarily from 22 to 25 lire per quintal, ex-factory, giving a citrate of lime yield, he figures, according to the percentage of acidity of the juice and working efficiency, of from 10 or 12 to 14 quintals. In order to obtain his entire cost of doing business, he announces, he adds 12 lire to the amount paid for each quintal of lemons. He figures his citrate of lime to be worth 300 lire per ton, ex-factory, and that each quintal of his lemons will yield from 7 to 9 to 14 English ounces of lemon oil. This latter, he avers, he is willing to sell at 24 lire per English pound, which may be his top price, inasmuch as exporters in Messina have been quoting old crop lemon oil at $1.62 and new crop lemon oil at $1.60 per pound, c.i.f. New York, this price being considered high. However, manipulation of the virgin oil for export would probably account for a larger profit range than would appear from these figures.

Pay and Efficiency of Oil Pressers

The proprietor of an English lemon oil producing an exporting house in Messina writes:—"The official rate of pay for sponge oil workers is 4.45 lire per basket of 55 kilos of skins. The hours are eight per day, with faculty to work overtime with a 10 percent increase in wages. The amount of oil which one man can work varies according to the lateness of the season. From December to March a good hand will turn out 2,000 cubic centimeters in eight hours. From March onward there is a sharp decline in the return, until some 1,200 cubic centimeters is reached in April. This is due to the diminished yield of the lemons during the later months of the season. Some men will turn out as much as 2,500 cubic centimeters from five baskets of skins in December and January."

More Modern Plant

Closer to Palermo, at Settecannoli, is a more modern plant, which, though small, uses lately invented machinery. This slices up the entire lemon, presses out the lemon oil into the resultant liquid. The whole bulk is distilled in vacuo, the oil coming over with water, from which it easily separates on standing. The residue in the still is, of course, treated for citric acid. This is known as the Peratoner method. The resultant oil is said to be much inferior to that obtained by the sponge method. It is sold at about from 1 lire to 2 lire per Sicilian pound, a Sicilian pound being figured at 317.621 grams. The manufacture of this oil is said to be confined to Palermo. The proprietor of this plant declared he was under the necessity of paying 25,000 lire a year in taxes, and figured his entire costs at about 8.50 lire per quintal. His machinery costs he figured as follows, f.o.b. Milan:—Machine for slicing and pressing, 10,000 lire; a steam engine, 5,000 lire; two distillation machines, 65,000 lire each. Only about three men to attend the machinery are employed.

Concentrated Lemon Juice

The manufacture of concentrated lemon juice is said to be growing in importance, due to the fact that no tariff for importation into the United States is charged. This manufacture is confined virtually to the Arenella factory at Palermo, which is reported to produce from 400 to 600 tons a year, the greater part of which is exported to the United States. It is described as a dark brown, viscous liquid, containing from 60 to 68 percent of citric acid. It is made simply by evaporating natural lemon juice in vacuo until the requisite strength is reached.

Citric Acid

The manufacture of citric acid is a comparatively simple process. The citrate of lime is treated with sulphuric acid, the products formed being citric acid and sulphate of lime. These are passed over rollers, the sulphate of lime being pressed out in layers and dumped. Following filtering, the solution of citric acid runs into vats below, and is then evaporated in vacuo until the solution is very strong; it is then run out into crystallizing baths, where it is permitted to cool slowly. After a day or so crystals of citric acid separate out on the sides of the vats.

Adulteration

That adulteration exists, especially of lemon oil, is not denied by Sicilian exporters. One dealer writes:—"An important and interesting point is that very often lemon oil can be bought cheaper in London and from exporters here than it can be on the real brokers' market here. This is, of course, due to adulterations, and it is a serious drawback to people who want to export pure oil. We are doing our best to combat this, but unless buyers understand and want pure oil, it is very difficult."

Another, queried as to adulteration, answered:—"Oh, yes, adulteration exists and is expected. We are also informed it takes place in America after we get through with it, distributors there carrying the process still further. As a matter of fact, I should hate to drink any American soft drinks made from such products."

One of the chief sources of adulteration lies in lemongrass citral, which is imported in important quantities from India into Sicily. American and British regulations require a minimum citral percentage of 4 percent. This is deemed by some exporters as an artificial standard, causing a lot of trouble, and inducing adulteration, particularly with terpenes, which are a by-product in the concentration of these oils. Imported lemongrass citral is added to low grade lemon oil to bring it up to its 4 percent standard. In the manufacture of concentrated lemon oil from pure lemon oil, the concentrated is obtained by distillation, leaving the terpenes. Lemongrass citral and a proportion of pure lemon oil are mixed with the terpenes, the proportion of pure lemon oil and terpenes being about 50 percent each, with 2 percent lemongrass citral being added to make up the bulk. Last year even turpentine was added as an adulterant, but proved unsatisfactory, being comparatively expensive and easily detected, especially by distillation. It is stated that lemongrass citral is regularly added to distillation-made lemon oil to bring up the citral content to the required 4 percent, such distillation oil not being as high in citral percentage as sponge oil.

Because of the 4 percent standard set by American and British regulations, buying locally in Sicily is done on the same basis. For every 0.1 percent higher than 4 percent the seller gets 5 centesimi (a centesima is 1/100 of a lira, or .0546 of an American cent; at the present quotation 1 lira equals 5.46 cents). He loses the same amount for every 0.1 percent lower than 4 percent.

The citral in pure oil can be anything from 3.5 percent to 5.5 per cent, and it varies from district to district. However, no exporter will ship lemon oil with 5 percent citral when the foreign buyer pays him only on the basis of 4 percent; so he simply adds the requisite quantity of terpenes to bring his high grades down to the official limit of 4 percent, and just about as simply adds his lemongrass citral to bring his low grades up to the 4 percent standard.

On this point a citrus chemist remarks:—"I personally do not think that there is any difference in odor between 4 percent and 5 percent lemon oils, and intelligent consumers would do well to buy their oils guaranteed to be of virgin and pure quality from some really reliable shipper who could be trusted to ship this type of oil in consideration of a just price."

Loud complaint has been voiced that the American import analysis formula to permit entrance of oil is not known, one shipper declaring this interfered with exportation to the United States, inasmuch as shippers were afraid to export for fear their product would be turned down because of their ignorance of the formula.

Sicilian Imports from California

Concerning reports in America that California orange oil has been imported by Sicilian houses for raising the quality of Sicilian oil, the chemist of a long established export house, on being queried, replied as follows:—

Regarding the importation of Californian orange oil by Messina houses, I think that there must be a certain amount of exaggeration on this point, judging from the fact that the California oil is about two-thirds the price of the Sicilian oil in ports outside Italy. There is a heavy tariff to pay for the importation, which would probably bring the price close up to our own oil. Now, I tell you quite frankly that Californian oil is much inferior to the Sicilian, as it is made by a distillation process which can never give the same results as by an oil expelled from the skin by the sponge method. I distilled a large sample of Californian orange oil about three years ago, and I found that it had very little body; that is, it contained little in the way of esters and aldehydes, which are the flavoring materials in the oil. It gave an insignificant yield of terpeneless orange oil (concentrated oil), so that there could be no question of its being able to strengthen even a low grade domestic orange oil. This description is quite apart from any results that the consumer finds in flavoring his products.

I do not absolutely exclude the possibility of Sicilian shippers using Californian sweet orange oil, but you know better than I, as such information is kept very dark. It is often rumored that some of the largest shippers practice things that do not seem possible at a first glance. Importers and consumers mostly buy the brand, but I am afraid that qualities of brands have changed since their inception thirty or forty years ago.

Asto reports of citric acid adulteration, the same chemist asserts:—"In connection with the possibility felt to exist of adulterating high grade citrates, I wish to inform you that the official method of analysis is such as to preclude any possibility of calculating into the result such adulterants as salts of sulphuric acid."

Exports of Citrus By-Products

Italian Government statistics show the following export totals for indicated years:—

	Quintals— Concentrated lemon juice.	Crude lemon juice.	Citrate of lime.	Citric acid.	*Essential oils.
1914	8,121	1,340	56,878	5,988	6,468
1915	8,477	2,074	64,040	7,555	8,159
1916	7,545	449	72,789	10,446	7,534
1917	5,204	705	50,377	8,320	5,973
1918	6,081	368	37,357	7,538	6,336
1919	3,651	18	34,583	8,972	8,657
1920	5,459	536	87,771	18,293	6,777
1921†	....	....	....	....	....
1922	5,098	183	90,170	15,776	9,842
1923	4,283	163	30,895	13,303	9,230
1924	5,174	6,806	37,752	19,306	10,441
1925	7,794	10,197	46,780	27,768	10,798
1926	19,228	10,299	45,961	20,613	9,104
1927 (a)	24,262	5,826	22,383	13,579	6,152
1926 (b)	18,608	10,101	35,737	11,951	6,531

* Including orange, lemon and mandarin.

† Complete statistics for 1921 are lacking or inadequate.

(a) Jan. 1-July 31; (b) Jan. 1-July 31 for comparison.

Exports by Countries

To give an idea of the distribution by countries of the by-products in the foregoing table, exports for 1926 and the first seven months of 1927 are given in the following tables:—

Exports of Crude Lemon Juice

Countries.	Year 1926. Quintals.	Jan. 1-July 31, 1927. Quintals.
Algeria	.02	....
Argentina	.10	....
Australia & New Zealand	.16	.27
Austria	....	.05
Belgium	6.90	11.23
England	101.18	143.71
France	.28	.40
Germany	67.10	102.98
Holland	2.30	15.13
India (British)	.03	....
Malta	.60	....
Norway	.08	.07
Sweden	....	.42
United States	5.36	.44
Total	184.11	274.70

Exports of Citrate of Lime

Countries.	Year 1926. Quintals.	Jan. 1-July 31, 1927. Quintals.
England	21,074	13,760
France	11,935	5,622
Germany	2	....
Tripolit. and Cir.	....	3,001
United States	11,939	....
Other countries	1,011	....
Total	45,961	22,383

Exports of Citric Acid

Countries.	Year 1926. Quintals.	Jan. 1-July 31, 1927. Quintals.
Austria	189	101
Belgium	511	350
Czechoslovakia	....	243
Denmark	227	69
France	2,632	2,062
Germany	813	2,274
Great Britain	2,699	2,291
Greece	....	211
Netherlands	3,995	1,497
Russia	....	541
Spain	1,350	1,017
Switzerland	420	320
Japan	659	246
India (British) & Ceylon	....	62
Algeria	....	31
Brazil	646	107
Argentina	2,808	501
Canada	....	157
United States	866	360
Uruguay	138	85
Other countries	2,701	854
Total	20,613	13,579

Exports of Essential Oils, Including Lemon, Orange and Mandarin

Countries.	Year 1926. Quintals.	Jan. 1-July 31, 1927. Quintals.
Austria	40.95	31.16
Belgium	29.25	27.72
Czechoslovakia	38.25	13.21
Denmark	71.14	16.05
France	1,782.35	881.75
Germany	832.60	659.88
Great Britain	2,141.39	1,748.12
Netherlands	215.02	189.50
Spain	141.83	120.98
Sweden	17.28	6.35
Switzerland	84.46	86.66
Ukrainia	....	4.50
Japan	18.84	27.68
British India and Ceylon	20.82	8.49
Fed. Australia	215.65	220.16
Egypt	26.90	7.35
Argentina	116.68	76.23
Canada	93.56	81.54
United States	3,143.48	1,726.53
Other countries	73.90	218.54
Total	9,104.35	6,152.40

Exports of Lemon Oil

Total exports of lemon oil for the year 1926, according to the official figures published by the council, amounted to 561.716 tons. The distribution of this by countries (in quintals) as shipped by sea and by rail, is shown in the following table. The exports by countries for the first seven months of 1927 are also given.

Exports of Orange Oil

The orange oil export total for 1926 is given by the council as 112.647 tons. Distribution by countries (in quintals) as shipped by sea and rail, is shown in the following table. The exports by countries for the first seven months of 1927 are also given:—

Exports of Lemon Oil and Orange Oil

	Quintals— Oil of Lemon		Oil of Orange	
Countries.	Year 1926.	Jan. 1-July 31 1927.	Year 1926.	Jan. 1-July 31 1927.
Argentina	76.80	55.38	6.28	11.02
Australia	188.57	188.90	9.71	8.63
Austria	1.25	12.96	..	.51
Belgium	33.55	15.66	2.17	6.19
Brazil	2.95	3.35	1.75	.85
Canada	84.58	70.41	8.71	9.12
Czechoslovakia	5.29	.80	.37	..
Chile	..	1.50	..	.25
China	..	10.00	..	..
Cuba	..	.90	..	..
Denmark	38.08	14.84	3.57	2.76
Egypt	11.94	4.78	2.97	.29
England	1,713.03	1,377.74	118.44	151.36
Finland	.25	..	.50	..
France	565.92	395.37	194.40	77.23
Germany	513.72	378.90	105.86	98.13
Georgia	..	3.50	..	..
Greece	5.51	3.57	1.93	.36
Holland	140.39	104.32	80.23	64.44
Hungary	.26	.12	..	.13
India (British)	8.21	1.18	4.65	1.00
India (Dutch)	..	2.00	..	..
Italy	32.90	18.06	16.05	13.44
Java	..	2.00	..	.50
Jugoslavia	1.00	.45	..	..
Japan	4.50	18.26	3.72	4.18
Malta	.25	.25	..	..
Mexico	1.00	2.60	.30	..
Norway	8.05	2.50	..	..
Poland	..	.59	..	..
Roumania	1.32	1.24	..	.25
Russia	5.00	17.69	..	2.75
Spain	101.04	95.00	10.99	6.52
Sweden	14.67	14.74	5.13	2.44
Switzerland	37.71	12.91	3.57	2.45
Tunis	.20	.30	..	..
Turkey	1.99	2.32	.34	1.66
United States	2,014.03	1,110.04	543.63	247.99
Uruguay	2.30	1.60	1.20	.40
Other countries	..	8.75	..	6.30
Total	5,617.16	3,954.68	1,126.47	721.15

Essential Oils: Market Review

The year 1927 in the market for essential oils was another one of price reductions, despite the fact that in January many trade leaders had believed that quotations then in force constituted a level that might be considered normal. The trend in most materials was downward throughout the year. For example, out of a group of thirty-two essential oils prominent in trade during the year, there were seven higher in December than in January; nineteen lower in December than in January, and six without change. This downward trend of prices may be noted in the Reporter index numbers which follow.

Comparative Values

Oil, Paint and Drug Reporter index numbers, based on 100 as the average price for twenty essential oils August 1, 1914, ranged as follows by quarters over 1927:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
137.5	129	126.8	124.5	132.7

Business in essential oils as a whole was moderate in volume most of the year. Consumers were inclined to buy rather close to actual manufacturing requirements, and such a policy served to hold stocks down to a moderate basis. By buying often in smaller units rather than seldom but in large quantities, purchasers tended to avoid the losses possibly to be sustained by declines in prices and at the same time turned over their capital more often. Competition was very keen at all times. Buyers were active in pursuit of business and that fact was a contributing element to the downward trend of most quotations. A feature of note during the year was the formation of an association among essential oil dealers and importers the purpose of which was to iron out trade difficulties having to do with sales contracts, quality standards and the like.

For purposes of review, the market may be conveniently divided into four groups: (1) Domestic, (2) French, (3) Italian, and (4) miscellaneous oils.

Domestic Oils

Many of the domestic oils are produced in Michigan and Indiana. Among such are peppermint, spearmint, erigeron, tansy, pennyroyal and wormwood. With the exception of the last-named oil, the price trend in this group was almost continuously downward after new crop conditions became effective. The crops in every instance but wormwood proved to be large. Peppermint production was estimated by some to have been as much as 750,000 to 900,000 pounds. These estimates included the rather ample production in the Northwest.

The crop was surely a large one, and to it was added an important carryover from 1926 production. The size of this carryover was subject to estimates too widely divergent to be helpful. It was certain, however, that the quantity of peppermint oil available to manufacturing consumers for use in 1927 and 1928 was so large as to keep prices definitely committed in buyers' favor. Toward the end of the year both buyers and sellers assumed a position of indifference. The former had small needs to cover, and little difficulty was experienced in covering them. The latter were seemingly without the slightest interest in what buyers might do, if anything. However, those with a close touch on the primary market pulse were of the opinion that it would require a most unusual circumstance to keep prices from further declines after the turn of the year. From the standpoint of prices the high and low for the year tell almost the whole story. The market was high in January at $4.75 per pound, and it was low in December at $3.25. The only sign of an upward reaction in prices was in May-July when quotations rose from $3.50 to $3.90 per pound for natural oil. Once new crop production got under way the upward movement was ruined and declines in prices came thick and fast. The total decline in prices during the year was $1.50.

Spearmint underwent a reduction in price almost as great as that in peppermint; the decline totaled $1.25 from January to September. The article differed from peppermint in this respect: spearmint prices declined more or less steadily until September, while the peppermint decline was interrupted only by a sporadic and meaningless advance prior to the arrival of the new crop. Production of spearmint was normal and the quality ran high. The result was a very stable market once all inflation had been eliminated.

The opening price in January was $4.50 per pound, that being high for the year. The low point was reached in September when sales were made at $3.25. Shortly after the beginning of October it was learned that the production would not be excessive as in the case of peppermint, and sellers tightened up on prices promptly. In September, quotations were advanced from $3.25 to $3.40 per pound, and the advance in October put the market up to $4. November was a month of transactions made at prices ranging from $4.35 to $4.50, being on a rising scale most of the time. December business slumped and prices were reduced first to $4.40 and finally to $4.25. The market was believed to be quite stable at the end of the year.

Erigeron was another Middlewestern oil that was overproduced and which underwent sharp revision in prices. Declines totaled $3 on the year, the January price of $5.25 per pound being high and the December quotation of $2.25 low, with few buyers. Tansy went through a similar development. Quotations dropped from $5.75 in January to $4.25 by the end of the year.

Wormseed was 45c. lower in December than in January, but the high price for the year, $3.75, ruled in July, August, September, and a part of October. Therefore, the gross decline for the year was 95c. At one time, mainly in summer, it appeared that the crop of wormseed would be small and of poor quality, due to infestation of young plants still in the frames; they were attacked by a variety of flea that sucked the tender growth and damaged, if not killed, the plants. The crop was replanted in many instances. However, when the crop was in and oil was produced, production was said to have been good, though it was less than in 1926. To the new crop was added a very liberal carryover from the previous season. The result was declines in prices that fitted in closely with the very conservative consuming demand that featured the last quarter of the year.

Wormwood stood out in sharp relief from most of the domestic oils because of advances in prices from $7 in January to $11.50 per pound in December. The fact was that there was virtually no oil produced in 1927. The chief advance in prices came late in the year when it was clear that consumption in 1928 would have to depend on the holdover stock from 1926 production. The carryover was small and was quickly bought up by strong factors. At the end of the year the market was virtually nominal as there remained only the smallest quantities of pure, unsophisticated wormwood oil in the hands of dealers. So scarce was the article that all kinds of oil were offered under the name "wormwood," such offerings even including one from Italy, the sample of which was blue in color in place of the conventional green. Hemlock and spruce were also on the stronger side of price developments, quotations advancing from 82½c. per pound in January to close at 95c. in December. Sassafras and pennyroyal remained without change at 80c. and $2 per pound respectively.

Italian Oils

The principal Italian oils consumed in this country are bergamot, lemon, and orange. Bergamot and lemon ended the year with prices lower in December than they had been in January. Orange, on the contrary, scored a marked advance. The price for bergamot in January had been rather higher than normal—it was $7.10 per pound. However, before the end of that month the market here was down to $6. This was caused by marked reductions in the import cost of the article. Fluctuations in prices were the rule for the first quarter at least. In February, the market advanced from $6 to $6.35 per pound with buying here rather active. March was low at $6.15 and high at $6.25, and was generally called a firm month. Changes in April were exactly within the range of March fluctuations. May found the market in a downward reaction, and quotations dropped from $6.15 to $6 per pound, being easy at the end of the month. June and July were dull months, prices remaining at $6 per pound. New crop influences came into action in the second half, and prices declined more or less steadily. July quotations were $5.83 per pound, and by late October prices were down to $5.25. December ended at $5 per pound and quite easy.

Lemon oil was in strong position following a decline from $2.35 to $2.15 per pound early in the year. There was excellent demand for spot and shipment oil and prices for both were substantially advanced on the buying. The rising trend continued from $2.50 early in February through March, when $2.75 per pound was paid. That price, incidentally, was the high for the year. This was the first of three pronounced price swings that were noted during the year.

The second swing started in April. It was a downward trend that followed closely reductions in prices at Messina, developments closely related to stocks there and inability of sellers to move large quantities easily. Quotations in April were high at $2.70. The decline was steady from April to June when as low as $2.15 was quoted for spot deliveries. July and August were proverbially dull as to demand, but prices were fairly steady at $2.15 during both months. The low for the year was reached in September, being $2.05 per pound and representing a 10c. decline for that month. This was the end of the second swing of prices.

The last movement was an advance, which started at $2.05 and reached $2.25 per pound by the end of December. Many brands underwent a much sharper advance. The top price asked on spot at the end of December was $2.50 for one particular brand. That particular brand was priced minimum at $2.75 at the end of the year.

Throughout the last quarter of the year the spot price had been consistently below the replacement market. At no time was it possible to replace merchandise at the prices quoted for spot deliveries. This was due mainly to the fact that, regardless of brand, local dealers kept in mind the fact that they had bought new crop oil for as low as $1.35 per pound in bond and that such oil had yet to be delivered to them. Therefore when the market went to $1.89 per pound in bond, quoted for a high standing brand, the spot quotation was not raised proportionately. Of course conservative demand here played a not unimportant part in keeping spot prices to a most moderate increase.

In a general sense, prices for Italian orange oil underwent changes parallel with those in lemon. However, there was this difference: prices for orange in December were 35c. higher than the highest quotation that had ruled in January; in lemon, they were 10c. less. The January price was highest at $2.55, and lowest at $2.40 per pound. During the next two months quotations were advanced to $2.75 per pound. In April there was a downward dip in price caused by the lower quotations that came from Messina in company with the similar drop in lemon prices. Quotations reached a low of $2.65 in April and in May, the market became $2.55 per pound.

June brought quotations to the lowest point for midyear, namely, $2.50. The rise started in August and was especially swift toward the close of the year when prices in Messina were higher than those on spot. Quotations in August started at $2.50 per pound and reached $2.75 in September. October and a part of December found quantities unchanged at $2.75 per pound, but at the end of the latter month spot stocks were limited and in strong hands. The result was a rise to $2.90 per pound. As much as $3.25 was wanted for some brands.

West Indian orange was strong throughout the year. In fact, at times the spot price was far under what further stocks could be bought for in the primary market. It was not until the end of the year that most of such an unnatural situation was partially rectified; the spot and replacement market was at least on a parity. The spot market in January was low at $2.45, which was also low for the year. Quotations were $2.50 before the end of the month and that price remained constant until June when a few transactions took place at $2.45. The return to $2.50 was prompt and it was not until October that the spot market reacted up in sympathy with replacement costs; quotations here were then named at $2.60. December business was written mostly at that figure but just before the end of the month. $2.75 per pound was quoted, strong with an upward tendency.

French Oils

French oils were mostly weak. This included oils produced in France and those marketed under French influence. This was primarily due to the fact that competition among foreign shippers was very keen throughout the year. Also, unsold stock in this country were large at all times and when production costs were reduced abroad or competition put the shipment price down, local dealers were inclined to shade in order to overcome the influence of the opportunity of procuring replacement merchandise at lower prices in the primary market.

Algerian geranium, for example, opened the year at $2.75 per pound, and after working quotations up to $3 per pound by the end of May, sellers succeeded in maintaining that as a minimum figure until July when sales were made at $2.85 per pound. That was the asking price until December when a slump to $2.75 took place. Lavender flowers were in similar position. The year opened at $3.75, which was high for the period. By February, the market was down to $3.25 per pound, and that was the asking price until July when $3.15 was established. From then to the end of the year fluctuations were between $3.15 and $3, the close being at the latter figure.

Prices for Bourbon vetiver were slaughtered in the second half of the year. At one time in the first half of the year, the market seemed to be firm due to high cost of replacement. Prices were advanced during that period. However, that was entirely offset in the second half when sellers offered freely at continual declines in prices. The market was $11 per pound in January. By midyear it was $10.25. December 31, it was $6. The slump in shipment prices alone was responsible for liquidation of high priced oil in this market at prices that could do nothing but mean heavy losses to the seller. Bois de Rose was in sharply competitive position throughout the year. The competition came between the Brazilian and Cayenne oil, on one hand, and Mexican linaloe on the other. Quotations for bois de rose in January were $2.15 per pound. By December, $1.85 was obtainable.

Miscellaneous Oils

Among the miscellaneous oils the decline in prices for clove oil was a feature. This decline followed a severe cut in production costs, a movement that paralleled a decline in prices paid for clove spice in the Far East, where a large crop was expected. Clove oil prices were high for the year at $1.60 per pound in January, while in December the lowest price for the year, $1.25 per pound, was reached. Prices from June through September were unchanged at $1.40 per pound. There was but one other month in which no change in price took place, that was November, when $1.30 was the market.

Cassia was a rather uninteresting item. Prices from China were generally favorable to buyers throughout the year, and that fact kept quotations for redistilled to a downward trend. Quotations declined from $2 per pound, high for the year in January, to $1.75, low for the year and reached in November.

Sandalwood was steady after a small decline noted early in the year. Throughout the period $7 per pound was paid and an excellent business was done. The only modifying factor was the production of an excellent quality of oil in this country, the material being distilled here from imported sandalwood. Native cananga was weak throughout the year. Prices dropped steadily throughout the period, the high being $5.15 in January, $4.25 on July 1, and $3.30 on December 31. Of course, quotations for rectified material were also reduced.

Coriander was a conspicuous exception to the generally downward trend of spot prices. Due to an undersized crop of seed, with higher prices being developed as a natural consequence, producers of oil advanced prices from a low of $5.25, prevailing July 1, to the basis of $10, in force at the end of December. The trend had been downward during the first six months of the year; the January price had been $5.85, which compared with $5.25 in force at midyear.

Eucalyptus was conspicuous for the reason that co-operation among Australian producers, assisted by semi-official acts by the government of that country, permitted shippers to put the article on a more remunerative basis. Quotations in January were 51c. on the spot; at the end of the year 57c. was being paid regularly under excellent demand. High quality patchouli was not obtainable save at high prices throughout the greater part of the year. This was due to difficulties at the point of production and the tendency to offer sosphisticated oil, a tendency that seemed to grow as the year became older. The lowest price for a fair grade of oil was $7, in January. For the same quality $8 had been paid in December and as high as $10 was asked for some grades.

Prices for sixteen typical essential oils ranged as follows over the year:—

	Jan. 1.	July 1.	Dec. 31.
Bay	$1.90	$1.85	$1.75
Bois de rose	2.15	2.15	1.85
Cananga, native	5.15	4.25	3.30
Caraway	1.85	1.60	1.65
Cedarwood	.35	.32	.27
Citronella, Ceylon	.38	.35	.34
Coriander	5.85	5.25	10.00
Erigeron	5.25	4.50	2.25
Eucalyptus	.51	.54	.57
Ginger, distilled	5.25	4.55	4.75
Lime, distilled	7.50	6.75	6.50
expressed	9.50	9.50	9.50
Patchouli	7.00	7.75	8.00
Pine needle	.65	.90	.85
Vetiver, Bourbon	11.00	10.25	6.90
Wormwood	7.00	7.00	11.50
Advanced			5
Declined			10
Unchanged			1

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Essential Oils: Record of Prices

Almond, Bitter

May 20, 1872, the price was $14; October 18, 1881, $4.50 to $7.50; 1891, $4.50 to $7.25; 1901, $3.50 to $4.25; 1911, $3.50 to $5; 1913, $3.50 to $6.50; 1917, November, $13.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.75	$2.75	$2.75	$2.75
February	2.75	2.75	2.75	2.75
March	2.75	2.75	2.75	2.75
April	2.75	2.75	2.75	2.75
May	2.75	2.75	2.75	2.75
June	2.75	2.75	2.75	2.75
July	2.75	2.75	2.75	2.75
August	2.75	2.75	2.75	2.75
September	2.75	2.75	2.75	2.75
October	2.75	2.75	2.75	2.75
November	2.75	2.75	2.75	2.75
December	2.75	2.75	2.75	2.75
Year	2.75	2.75	2.75	2.75

Almond, Artificial, U.S.P.

January 23, 1902, the price was 75c. to $1; October 18, 1911, 48c. to 85c.; 1913, 40c. to 45c.; 1917, January, $5.

(For comparative prices, 1926 and 1927, see Benzaldehyde, Coaltar Products, page 58.)

Bergamot

October 18, 1871, the price was $4.50 to $4.75; 1881, $2.45 to $2.50; 1891, $2.90 to $3.70; 1901, $2.50 to $2.75; 1911, $3; 1913, $6 to $6.50; 1918, September, $7.50.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$5.40	$5.35	$7.10	$6.00
February	6.00	5.40	6.35	6.00
March	7.00	7.00	6.25	6.15
April	6.50	6.50	6.25	6.15
May	6.00	5.75	6.15	6.00
June	5.75	5.25	6.00	6.00
July	5.50	5.50	6.00	6.00
August	6.75	5.50	6.00	6.00
September	7.00	6.75	5.85	5.85
October	7.50	7.25	5.75	5.25
November	8.50	7.75	5.25	5.25
December	7.75	7.25	5.25	5.00
Year	8.50	5.25	7.10	5.00

Cassia, Redistilled, U.S.P.

February 8, 1909, the price was $1.75 to $1.85; October 18, 1911, $1.25 to $1.40; 1913, $1.30 to $1.40; 1918, November, $3.75.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$3.25	$3.00	$2.00	$1.00
February	2.90	2.85	2.00	2.00
March	2.75	2.75	2.00	1.90
April	2.75	2.60	2.00	1.95
May	2.55	2.40	1.95	1.95
June	2.35	2.25	1.95	1.95
July	2.25	2.20	1.95	1.90
August	2.15	2.10	1.90	1.90
September	2.20	2.10	1.90	1.85
October	2.25	2.15	1.85	1.80
November	2.15	2.10	1.85	1.75
December	2.10	2.05	1.75	1.75
Year	3.25	2.05	2.00	1.75

Clove, U.S.P.

November 22, 1871, the price was $1.40 to $1.50; October 18, 1881, $1.90 to $2; 1891, 75c. to 77½c.; 1901, 60c. to 62½c.; 1911, 97½c. to $1; 1913, $1.15 to $1.20; 1917, November, $4.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.85	$1.85	$1.60	$1.50
February	1.85	1.85	1.45	1.40
March	1.85	1.85	1.45	1.40
April	1.90	1.85	1.40	1.40
May	1.85	1.80	1.40	1.35
June	1.85	1.85	1.40	1.40
July	1.85	1.85	1.40	1.40
August	1.85	1.70	1.40	1.40
September	1.70	1.65	1.40	1.40
October	1.65	1.60	1.35	1.30
November	1.60	1.60	1.30	1.30
December	1.60	1.60	1.30	1.25
Year	1.90	1.60	1.60	1.25

Geranium, Rose, Algerian

November 22, 1871, the price was $8 to $10; October 18, 1881, $4.50 to $8.50; 1891, $7.50 to $8.50; 1901, $5.25 to $6.50; 1911, $4.25 to $4.50; 1913, $9.50 to $10; 1918, November, $11.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$4.00	$4.00	$2.75	$2.75
February	4.00	3.25	2.75	2.75
March	3.25	3.25	2.85	2.75
April	3.25	3.25	2.85	2.85
May	3.25	3.05	3.00	2.75
June	3.05	2.90	3.00	3.00
July	2.90	2.50	3.00	2.85
August	2.75	2.50	2.85	2.85
September	2.75	2.75	2.85	2.85
October	2.75	2.75	2.85	2.85
November	2.75	2.75	2.85	2.85
December	2.75	2.75	2.75	2.75
Year	4.00	2.50	3.00	2.75

Lavender Flower, U.S.P.

November 22, 1871, the price was $2.90 to $3; October 18, 1881, $2.10; 1891, $1.30 to $1.75; 1901, $1.20 to $1.30; 1911, $2.25 to $3.25; 1913, $3.75 to $4; 1919, December, $11.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$4.75	$4.75	$3.75	$3.50
February	4.75	4.75	3.25	3.25
March	4.75	4.75	3.25	3.25
April	4.50	4.50	3.25	3.25
May	4.50	4.50	3.25	3.25
June	4.25	3.90	3.25	3.25
July	3.75	3.75	3.15	3.15
August	3.75	3.75	3.25	3.15
September	3.75	3.75	3.25	3.25
October	3.75	3.50	3.25	3.15
November	3.75	3.75	3.15	3.15
December	3.75	3.75	3.15	3.00
Year	4.75	3.50	3.75	3.00

Lemon, Messina

October 18, 1871, the price was $3.75 to $5.12½; 1881, $3 to $3.25; 1891, $2.15 to $2.75; 1901, 85c. to 95c.; 1911, $1.60 to $1.80; 1913, $3.75 to $4; 1920, March, $2.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.75	$2.00	$2.35	$2.15
February	3.25	3.00	2.65	2.50
March	3.00	2.60	2.75	2.65
April	2.45	2.30	2.70	2.50
May	2.25	2.15	2.40	2.30
June	2.20	2.20	2.30	2.15
July	2.60	2.20	2.15	2.15
August	2.65	2.65	2.15	2.15
September	2.65	2.60	2.15	2.05
October	2.60	2.60	2.30	2.20
November	2.60	2.55	2.20	2.20
December	2.45	2.45	2.25	2.20
Year	3.25	2.00	2.75	2.05

Twenty-seven Years' Prices

	H.	L.
1927	$2.75	$2.05
1926	3.25	2.00
1925	2.60	.95
1924	.97½	.70
1923	.80	.65
1922	.87	.63
1921	.95	.65
1920	2.00	.95
1919	1.85	1.05
1918	1.85	.87½
1917	1.20	1.05
1916	1.05	.90
1915	1.25	.95
1914	3.75	1.05
1913	4.75	2.20
1912	2.10	1.30
1911	1.65	.80
1910	.82½	.75
1909	3.00	.72½
1908	1.50	.70
1907	2.00	1.00
1906	1.20	.57
1905	.57½	.55
1904	.55	.50
1903	.70	.55
1902	.80	.65
1901	1.15	.80

Orange, Messina, U.S.P.

April 2, 1873, the price was $3.75; October 18, 1881, $3 to $3.25; 1891, $2.80 to $3.12½; 1901, $1.20 to $1.55; 1911, $2.45 to $2.60; 1913, $3.75 to $4; 1920, June, $11.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$3.00	$2.90	$2.55	$2.40
February	3.10	3.00	2.75	2.50
March	3.10	3.00	2.75	2.75
April	3.00	3.00	2.75	2.65
May	3.00	2.90	2.55	2.55
June	2.75	2.65	2.55	2.50
July	2.65	2.65	2.50	2.50
August	2.65	2.65	2.65	2.50
September	2.75	2.65	2.75	2.75
October	2.75	2.75	2.75	2.75
November	2.75	2.65	2.75	2.75
December	2.65	2.60	2.90	2.75
Year	3.10	2.60	2.90	2.40

Orange, West Indian

April 1, 1915, the price was $1.35; 1920, June, 95c.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.65	$2.65	$2.50	$2.45
February	2.65	2.65	2.50	2.45
March	2.65	2.60	2.50	2.50
April	2.65	2.60	2.50	2.50
May	2.65	2.65	2.50	2.50
June	2.60	2.55	2.50	2.45
July	2.55	2.55	2.50	2.50
August	2.55	2.55	2.50	2.50
September	2.55	2.55	2.50	2.50
October	2.55	2.55	2.60	2.50
November	2.55	2.55	2.60	2.60
December	2.55	2.55	2.75	2.60
Year	2.65	2.55	2.75	2.45

Peppermint, Natural

October 18, 1871, the price was $3.35 to $3.50; 1881, $2.70 to $2.80; 1891, $2.50 to $2.80; 1901, $1.65 to $1.75; 1911, $2.87½ to $2.95; 1913, $3.70 to $3.80; 1919, March, $9.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$26.00	$24.00	$4.75	$4.25
February	22.00	19.00	4.15	4.00
March	19.00	14.00	4.15	4.00
April	14.00	13.00	4.00	3.55
May	14.00	13.50	3.60	3.50
June	13.75	13.75	3.85	3.60
July	13.75	13.75	3.90	3.75
August	13.50	10.00	3.60	3.50
September	8.75	7.40	3.45	3.00
October	6.50	6.25	3.20	2.85
November	6.25	5.50	3.30	3.30
December	5.00	4.75	3.30	3.25
Year	26.00	4.75	4.75	2.85

Seventeen Years' Prices

	H.	L.
1927	$4.75	$2.85
1926	26.00	4.75
1925	28.00	10.00
1924	10.00	3.25
1923	3.25	2.65
1922	3.25	1.70
1921	3.00	1.70
1920	8.25	5.00
1919	9.00	5.25
1918	5.25	2.90
1917	3.60	2.20
1916	2.30	1.80
1915	2.00	1.35
1914	4.60	1.40
1913	3.85	2.75
1912	2.85	2.75
1911	2.90	2.25

Sandalwood, East India, U.S.P.

November 22, 1871, the price was $9.50 to $10; October 18, 1881, $7 to $8; 1891, $2.10 to $3; 1901, $3.50 to $3.75; 1911, $2.75 to $3; 1913, $5.50 to $6; 1917, December, $14.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$7.10	$7.10	$7.10	$7.00
February	7.10	7.10	7.00	7.00
March	7.10	7.10	7.00	7.00
April	7.10	7.10	7.00	7.00
May	7.10	7.10	7.00	7.00
June	7.10	7.10	7.00	7.00
July	7.10	7.10	7.00	7.00
August	7.10	7.10	7.00	7.00
September	7.10	7.10	7.00	7.00
October	7.10	7.10	7.00	7.00
November	7.10	7.10	7.00	7.00
December	7.10	7.10	7.00	7.00
Year	7.10	7.10	7.10	7.00

Sassafras, Natural, U.S.P.

October 18, 1871, the price was $1.15 to $1.20; 1881, 57½c. to 65c.; 1891, 38c. to 42c.; 1901, 40c. to 43c.; 1911, 70c. to 75c.; 1913, 55c. to 60c.; 1918, October, $2.50.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.80	$0.77½	$0.80	$0.80
February	.77½	.77½	.80	.80
March	.77½	.77½	.80	.80
April	.75	.75	.80	.80
May	.75	.75	.80	.80
June	.75	.75	.80	.80
July	.75	.75	.80	.80
August	.75	.75	.80	.80
September	.75	.75	.80	.80
October	.80	.80	.80	.80
November	.80	.80	.80	.80
December	.80	.75	.80	.80
Year	.80	.75	.80	.80

Spearmint, U.S.P.

June 5, 1872, the price was $4; October 18, 1881, $2 to $2.35; 1891, $1.85 to $2.35; 1901, $1 to $1.10; 1911, $4 to $4.50; 1913, $4; 1920, February, $13.50.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$12.75	$10.50	$4.50	$4.25
February	10.50	9.00	4.25	4.25
March	9.00	7.75	4.25	4.10
April	7.50	6.75	4.00	3.85
May	6.50	6.50	3.85	3.75
June	5.75	5.75	3.75	3.75
July	7.00	6.00	3.70	3.65
August	7.50	7.00	3.40	3.40
September	7.00	6.25	3.40	3.25
October	6.00	5.25	4.00	3.40
November	5.25	5.00	4.50	4.35
December	4.50	4.50	4.40	4.25
Year	12.75	4.50	4.50	3.25

Fifteen Years' Prices

	H.	L.
1927	$4.50	$3.40
1926	12.75	4.50
1925	14.00	3.75
1924	4.25	2.40
1923	2.50	2.35
1922	3.25	2.30
1921	6.25	2.75
1920	13.50	6.25
1919	12.00	5.50
1918	5.50	3.40
1917	3.65	1.85
1916	1.90	1.50
1915	1.75	1.35
1914	4.00	1.50
1913	4.85	4.00

Sweet Birch, Southern

November 22, 1871, the price was $4.40 to $4.50; October 18, 1881, $3.15 to $3.20; 1891, $1.80 to $1.90; 1901, $1.40 to $1.60; 1911, $1.35 to $1.75; 1913, $1.50 to $2; 1919, December, $6.25.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.75	$1.75	$1.75	$1.75
February	1.75	1.75	1.75	1.75
March	1.75	1.75	1.75	1.75
April	1.75	1.75	1.75	1.75
May	1.75	1.75	1.75	1.75
June	1.75	1.75	1.75	1.75
July	1.75	1.75	1.75	1.75
August	1.75	1.75	1.75	1.75
September	1.75	1.75	1.75	1.75
October	1.75	1.75	1.75	1.75
November	1.75	1.75	1.75	1.75
Year	1.75	1.75	1.75	1.75
December	1.75	1.75	1.75	1.75

Wintergreen Leaf, Southern

October 18, 1901, the price was $2.25 to $2.90; 1911, $4.25 to $5; 1913, $4.25 to $4.50; 1919, September, $9.75.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$3.75	$3.75	$3.60	$3.60
February	3.75	3.75	3.60	3.60
March	3.75	3.75	3.60	3.60
April	3.75	3.75	3.60	3.60
May	3.75	3.75	3.60	3.60
June	3.75	3.75	3.60	3.60
July	3.75	3.60	3.60	3.60
August	3.60	3.60	3.60	3.60
September	3.60	3.60	3.60	3.60
October	3.60	3.60	3.60	3.60
November	3.60	3.60	3.60	3.60
December	3.60	3.60	3.60	3.60
Year	3.75	3.60	3.60	3.60

Wormseed

November 22, 1871, the price was $2.50 to $2.60; October 18, 1881, $2.25 to $2.50; 1891, $1.40 to $1.50; 1901, $1.10; 1911, $3.75 to $4; 1913, $2 to $2.20; 1918, July, $11.

	1926. H.	1926. L.	1927. H.	1927. L.
January	$6.00	$5.75	$3.25	$3.00
February	5.75	5.75	3.00	3.00
March	5.75	5.70	3.00	3.00
April	5.65	5.60	3.00	2.85
May	5.00	5.25	2.85	2.75
June	5.25	4.85	3.50	3.00
July	4.75	4.75	3.75	3.50
August	4.75	4.65	3.75	3.75
September	4.65	4.50	3.75	3.75
October	4.40	4.25	3.75	3.50
November	4.40	3.50	3.50	2.90
December	3.25	3.25	2.85	2.80
Year	6.00	3.25	3.75	2.75

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The dye industry uses aniline; so does the pharmaceutical manufacturer.

The pharmaceutical industry uses hexamine; so does the rubber maker.

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A thinly fluid mobile liquid. Leaves no deposit when heated. Is almost colorless. Specific gravity 1.25. Liquid down to —25° F. Congeals at —33° F. Has a standard flash point of about 350° F. Is volatile at 212° F. and slightly so at normal temperatures. Boiling point 500° to 520° F. Specific heat between 86° and 140° F. 0.282.

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It is soluble in many organic solvent liquids and oils, the best being carbon tetra-chloride and benzol; is a solvent for many aniline and other dyes, for rubber, gutta percha, many varnish gums and resins and for other waxes when mixed in the molten state, and for mineral and vegetable oils.

It is neutral and non-corrosive to metals, free of moisture and will not absorb moisture.

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Gums, Waxes, Shellac: Market Review

Stocks of most articles were sufficient during 1927 to permit purchasers to trade rather close to actual needs. Frequent orders for smaller quantities rather than infrequent buying in large units was the general rule throughout the year. In some measure, the result was stability of prices and a rapid turnover of capital investment.

Gums

The outstanding feaures in the gum group during 1927 were the shortages in Sumatra benzoin, myrrh and asafetida. Other materials passed through a year of rather normal experience, but the above mentioned articles scored heavily for strength throughout the year. Business in the market as a whole was quite up to the usual experience. Manufacturing consumers were disposed to trade rather carefully. There was virtually no attempt made to anticipate requirements over a long period of time.

The situation in Sumatra benzoin challenged interest quite early in the period. In January it became known that the quality of gum arriving was not satisfactory, and that it was, in fact, far below the standards set by the United States Pharmacopeia. The more stringent enforcement of quality standards led to rejections by the wholesale. Stocks of strictly U.S.P. Sumatra benzoin became very scarce and holders were able to dictate prices at will.

A glance at the price developments during the year shows that in January the market was 33c. per pound and by the end of that month it was 40c. In February the market rose from 42c. to 45c. per pound. The advance continued in March, which month opened at 58c. and closed at 60c. The market in April was a strictly nominal affair, stocks being so low that firm prices could not be named by the end of that month. By the end of May quotations had reached 65c., which quotation continued in effect throughout the months of June and July. August found the market at the high point for the year, prices at one time being 70c. By the end of September the effect of a slight improvement in stocks was noted. Early in the month 70c. was paid, but the market was down to 60c. by the end of the period. An advance came again in October, 62c. being done. During the last two months of the year 65c. ruled strong and firm and there was no trace of competition or any early change for recessions in prices.

Curacao aloes passed through a year of rather marked advances in prices. The upward swing was from 10c. in January to 12c. by the end of May. May, June, July and August found prices strong at 12c., after which time they broke to 10½c. and ruled there at from September through December. The advances in every instance were due to strengthening influences at the primary source of supply. At all times spot quotations were kept strictly in line with replacement costs. Business was good throughout the period and prices at the end of the year appeared to be very firm.

Stability was the keynote of the gum arabic market. A fair sized crop was sold through European sources at prices productive of profits abroad if not on the spot. Competition was quite keen at all times, but there was perhaps slightly less excessive price cutting and a greater determination to make the article pay as fair a profit as possible. The bane of this market continued to be the excessive number of importers compared with the number of possible consumers. Also, the finances of importations came in for condemnatory utterances from time to time; they tended to create situations when merchandise had to be dumped in order to meet maturing indebtedness due to banks. The market in January swung between 11½c. and 11c. per pound. In February as low as 10½c. was done and the best price obtained was 11c. Stability appeared in March when the swing of quotations was between 10¼c. and 10½c. per pound. From June, through September prices failed to change, being noted at 10¼c. and subject to great stability. By November prices had worked up to 10¾c., and that figure ruled at the end of the year. Information in hand in December pointed to the probability of a large crop and possibly lower prices during the first quarter of the new year.

Stocks of asafetida were kept low throughout the year. At no time was there a truly adequate stock. Also, at no time was there more than occasional demand. Therefore the full effect of shortage was not felt, but the local trade watched the market closely throughout the year. Prices were high at 31c. and low at 29c. Until August 31 the market was 30c. to 31c. per pound. From September forward 29c. was done.

Camphor was sold in a buyers' market throughout the entire year. There was hardly a time when competition did not keep open quotations subject to shading on firm orders. The presence of synthetic camphor played a prominent part in the weakenings of prices for the natural product. The activity of foreign makers forced the Japanese monopoly to cut prices and to abandon its usual practice of naming a price for each quarter, the same to apply against allotments made to the celluloid makers. In place of setting one price, an open market was maintained and quotations changed from time to time as conditions might make necessary or advisable. The effect of the more competitive market was clearly evident in the price schedule of American camphor refiners. Quotations began the year at 79c., but by the end of that month they were down to 72c. To the end of July 72c was the market. In August 10c was knocked off at one clip, 62c per pound being established. That price ruled for the balance of the year. Japanese slabs sold at 72c. and then at 68c. in January. By the end of March quotations were down to 66c. and in the next month they were reduced to 65c. Business was done at 64c. in June and in October 63c. was called the market. The price reached 60c. in November and remained thereat for the balance of the year. At one time in November there was a temporary shortage in spot goods and 60c. was quoted nominally for a while. Early arrivals broke the shortage and deliveries again became prompt.

Imports for eleven months were as follows:—

	Pounds— 1927.	1926.
Crude	1,689,714	1,954,691
Refined	1,185,485	1,035,542
Synthetic	2,610,875	2,699,883
Totals	5,486,074	5,690,116

Myrrh was a mighty quiet article for most of the year. Prices began the year at 24c. and by February had worked up to 28c. They remained thereat until August, when they were reduced to 27c. Before the end of September they returned to 30c. Fireworks started in October. Prices jumped to 37c. in that month. The cause was the sudden discovery of very short stocks here and the difficulty, if not impossibility, in securing more than jobbing lots abroad. Throughout the balance of the year sellers tried desperately to obtain goods abroad, only to be met with the reply that they were not to be had. Quotations November reached 38c. In December a series of severe advances brought the market to 60c., a price record high for the past several years. Scarcity promised to be the dominant note for the early part of the new year.

Waxes

Business in waxes followed a normal course during the year. Most importers reported a larger volume that was achieved in 1926. Also some said that profits were more satisfactory, but there was little unity in opinion on that score. At all times competition was very keen regardless of what prices might do. The drive for business was kept at full steam throughout the twelvemonths. Some said the results had proven to be satisfactory; others did not concur.

The price trend in African beeswax was downward throughout the year. The high price paid was 40c., and that was done in January and February. From March through July 38c. was a well stabilized figure. The low price accepted was 35c., prevailing in September. when business was quite poor and desire for cash superceded willingness to hold. From then to the end of the year prices did better, sellers reporting strength in the foreign markets when crops were in, and it was found that production had not been excessive. Quotations went to 38c. in October, only to decline subsequently to 36c., which price ruled at the close of the year. Refined beeswax sold at 44c. in January and was as low as 41c. in September. The market recovered to 42½c. late in that month, and remained unchanged through the rest of the period.

Expanding consumption was the feature of carnauba wax throughout the past year. Export figures showed that the movement from Brazil to the world in 1927 exceeded liberally that of 1926. Despite that fact, and irrespective of the added fact that prices dropped from 36c. for North Country No. 3 in January to 28c. in October, stocks throughout the world were small most of the time. Much of the decline in prices was laid at the door of short sales of shipment wax made from time to time by certain factors in the New York market. At times complaints rang bitterly through the market. It made business increasingly hard to do, as buyers could not understand the wide differences in sellers' views of merchandise in forward position. The result was uttermost care in the placing of orders. However, by the close of the year, sales volume seemed to have reached a good total and in some instances was ahead of the business done in 1926. The principal drop in prices came between January and July. The year opened at 36c. for the No. 3 North Country grade. Quotations were down to 33c. by the end of the month, and the weakness continued until in March the market again broke sharply from 34c. to 31½c. per pound. Prices were off to 30c. in May, and reached 29c. in July. From then on, greater stability prevailed.

In the third quarter of the year stocks of the higher qualities of wax became extraordinarily scarce. At times some sellers were able to offer nothing and at one period there was a single holder of No. 1. This situation corresponded roughly with that prevalent at the beginning of the year when No. 1 was priced as high as 70c. per pound. By the end of the first quarter, however, the market was down to 57c. The full force of the shortage in yellow grades came in the final quarter of the year. The price advance really started in August from the basis of 55c. per pound. In September, the movement upward was very steady, 55c., 56c. and finally, 57c. being paid successively. In the first week of October 60c. was done and in the second week the market became nominal at 62c.; it was almost impossible to get a spot delivery. The nominal condition of the market continued and 65c. was quoted by the lone holder of spot goods. Arrivals of small quantities of unsold wax then eased the market back to 58c., which prevailed throughout November. By the end of December, prices were back to 55c.

Japan wax was subject to overimportation at times during the past year. Prices were broken down under this excess of spot supplies held mainly in quarters not well informed as to sources of consumption. The result was that regular dealers were able to pick up many bargains in the form of distressed stocks. Price range for the year was 34c. high and 17¼c. low. The price in January was high for the year —34c. per pound. Before the end of that month, quotations were down to 24c. The next big break came in February when sales were made as low as 19c. For the balance of the year prices fluctuated between 17¼c. and 19½c., prevailing mainly at 18c. to 18½c. most of the time. It was during this time —namely between July and December that the distressed stock was in the market. Importers bought distressed stuff as low as 16c., according to report, though consumers never got a chance at that price. The low of the market was reached in October. The feeling in December was stronger, distressed stocks having been absorbed and the entire market put into improved position thereby. This development corresponded with an advance in the shipment price of wax toward the end of the year.

The feature of the montan wax market came in the middle of November when a successful strike by the European lignite miners caused an increase in replacement costs and entailed higher spot quotations. Prices were named at 7c.; they had been 6½c. for the greater part of the year although in January they had been as low as 6c.

Shellac

The outstanding feature of the shellac market in 1927 was the severe rise in prices starting in May, reaching a peak in July, and then receding moderately when high prices stifled demand and cut consumption sharply. The cause for the basically strong position was a severe falling off in the size of the Bysaki crop.

This is the spring crop, it is the largest of several gathered during the year, and supplies the sticklac for production of T.N. and similar marks, and, to some extent, the higher marks also. It ordinarily runs to about 175,000 packages (164 pounds per package, net) but in 1927 it was reported to be close to 75,000 packages.

Estimates of the shortage differed widely, usually according to the position in which the estimater found himself when making a statement. However, one thing was clearly established: the crop was far below normal and the shortage was sufficient to drive prices up steadily.

For example, the market for T.N. was highest on spot at 58c. per pound, as quoted in the Reporter for July 18. The spot price for T.N. a year previous, in the Reporter for July 19, 1926, had been 27c. Therefore, within twelve months the price for T.N. in New York was advanced more than 100 percent. That advance was due solely to the small production of sticklac from the Bysaki crop.

Exports from Calcutta during the period of advance in prices were reduced appreciably. Total figures for 1927 show an export to the United States totaling 108,072 packages of orange shellac. For the equivalent period of 1926, exports of the same kind of shellac to the United States reached 169,891 packages. This is a falling off of 61,819 packages—or 10,138,316 pounds less of orange of the year. Total arrivals of all kinds of shellac in Calcutta were 17,891 long tons in 1927 as against 24,496 long tons in 1926. This was a decrease of 6,605 long tons to arrive in 1927, equal to 14,795,200 pounds or 90,184 packages of 164 pounds, net, each.

The result of the short Bysaki crop was felt later in the year when opposing interests "took market views" on two positions, the October and December deliveries. Virtually all offerings of both deliveries were bought by a single American importer, the quantities taken by others being very small. Spot stocks in December were exceedingly small in all but one quarter, and nearby arrivals were no more readily obtainable. The stocks of shellac throughout the world and available for consumption in the United States during the first quarter of the year were small, under strong control of a few hands, and said to be not in excess of 30,000 packages.

Record of the First Quarter

The New York market opened 1927 at 44c. per pound for T.N. which was within one cent of the opening price in 1926—namely, 45c. in the first week of January, 1926. Calcutta was uoted at 41c. per pound c. & f., New York, and the March position in London stood at 187s. per hundredweight, or 40½c. per pound in London based on the then prevailing rate of exchange. Prices in New York declined 2c. during January, bringing the market to 42c. The prices in February were between 42c. and 43c. most of the month with 42c. predominating on most business. In March, a sharp dip downward in spot prices came toward the middle of the month and by the end, 38c. per pound for spot goods was asked under conditions of light demand.

In the meantime, Calcutta declined from 41c. early in January to 28½c. at the end of February and continued to drop, reaching 35¼c. by the end of March. Quotations in London were reduced from 187s. to 163s. effective in the last week in March.

During the first quarter of the year, imports of orange shellac into the United States totaled 23,905 packages as against 37,487 packages during the first quarter of 1926. The export from Calcutta to the world for the first quarter was 59,664 packages in 1927 and 80,467 packages in 1926.

Whereas, exports of shellac from Calcutta to the United States showed a decrease, those to the United Kingdom were larger. For the first quarter, 1927, they totaled 5,355 packages more than in the equivalent period in 1926. To the Continent, they were 548 packages less, and to all other ports they decreased 3,218 packages. Hence, all receiving ports except the United Kingdom entered smaller amounts of shellac in the first quarter of 1927 in comparison with the equivalent period in 1926. The gain in the United Kingdom was due to speculators again entering the market, expanding the trading to a large volume and resulting in certain large interests taking a bullish position on the future of prices.

The effect of these increased shipments to the United Kingdom is evident in the returns regarding stocks of shellac in London on the first of each month. Such returns were as follows during the first quarter of 1927:—

	Shellac in packages— All kinds.	Orange.
January	15,894	14,009
February	17,197	15,352
March	19,302	17,225

London stocks became a feature as the year passed. The increase was followed by a sharp reduction in the holdings when one of the largest factors in the United States began to withdraw his holdings, shipping them to the United States. This was a situation that started to develop in October. Prior to that the increase in London had been steady.

At the close of the first quarter, prices in the United States were within 1c. of the low for the year. Those in Calcutta were within 2½c. of that point. The London prices were within 10½ shillings, or 2½c. of the cheapest quotation for the year.

The following tabulation quotes spot prices in cents per pound, Calcutta prices c. & f. basis, New York, and London quotations on a basis of shillings per hundredweight:—

T. N. Prices—First Quarter

Reporter Issue of—	New York. Per lb.	Calcutta. Per lb.	London. Per cwt.
January 3	44c	41c	*187s
January 10	44c	41¼c	201s 6d
January 17	42c	42c	198s 6d
January 24	44c	41c	190s
January 31	42c	39½c	189s
February 7	42c	39½c	190s
February 14	43c	40¼c	196s
February 21	42c	39½c	190s
February 28	42c	38½c	182s 6d
March 7	42c	38c	181s
March 14	41c	37c	†180s
March 21	39c	34½c	163s
March 28	38c	35¼c	163s

*March. † May.

During the first quarter shipments of orange shellac from Calcutta to the

United States, in terms of packages of 164 pounds net, each, were as follows:—

Shipments to the United States
(Orange Shellac)

	Packages	
	1927.	1926.
January	8,237	17,272
February	7,584	17,380
March	8,084	12,835
Totals	23,905	37,487

Record of the Second Quarter

The Calcutta market opened the second quarter with prices at the lowest for the year—namely, 32¾c. per pound for T. N., c. and f. New York. During April prices there fluctuated between that figure and 34c., which ruled at the end of the month. The New York spot market opened at 37c. and was unchanged during the month. London was likewise lowest for the year, the May position beginning April at 152s. 6d. per hundredweight. The balance of the month was one of irregular price trend, being 158s. in the second week, declining 5 shillings the next, and recovering 3s in the closing week of the period. On the whole April meant little save from a historic point of view; prices in all markets reached their low point for the year in that month. Also the low point did not last long, save as to the New York spot price.

A better understanding of the primary market situation caused certain large operators to act on convictions held privately for some time back. In fact, one of the largest shellac firms in the United States went "long" of the article before many were convinced that the Bysaki crop was actually far below normal in size. This firm's first-hand information was that unpropitious weather during the brooding season had caused damage that could do nothing but cut the crop. The consequent operations at first carried on quietly and without disturbing prices for a considerable period, and eventually became so intensive that the market awoke to the bullish influence early in April. By the middle of May the upward movement was in full swing and each advance was evidence of the buying principally at first by the firm mentioned above, but ultimately by others forced into the market to protect consuming and contract requirements.

During May prices in New York were advanced 10c. per pound, beginning the month at 38c. and ending it at 48c. Incidentally, 48c. was reached in the second week of the month—evidence of market strength. Calcutta jumped to 37¼c. per pound, c. and f. New York at the start of the month, being a rise of 3¼c. from the closing prices in April. The second week the market was up to 47½c. Reaction brought the price down to 43c. in the third week of the period only to advance again in the last week, ending the month at 47¼c. London rose from 174s. per hundredweight to 230s. high for the month and reached into the fourth week.

Shipments of orange shellac from Calcutta to the United States in the second quarter were 16,401 packages greater than in the first quarter. However, they were still considerably less than those for the second quarter in 1926, the decrease in 1927 being 6,686 packages.

Record of shipments of orange shellac from Calcutta to the world covering the outmovement for the first six months of the year were as follows:—

	Packages	
	1927	1926.
United States	63,935	84,203
United Kingdom	32,703	25,830
Continent	20,493	22,170
Other ports	6,897	12,389
Totals	124,028	144,592

Rise in London stocks affirmed the expansion in shipments to that spot and the revival of speculation along broad and active lines. The London stocks for the second quarter were as follows, the figures being those recorded on the first of each month:—

	Shellac in packages	
	All kinds.	Orange.
April	20,143	18,125
May	27,580	18,286
June	25,318	23,381

The following tabulation quotes spot prices in cents per pound, Calcutta prices on a c. and f. basis, New York, and London quotations on a basis of shillings per hundredweight:—

T. N. Prices—Second Quarter

Reporter Issue of—	New York. Per lb.	Calcutta. Per lb.	London. Per cwt.
April 4	37c	32¾c	*152½s
April 11	37c	34c	158s
April 18	37c	33¾c	153s
April 25	37c	34c	156s
May 2	38c	37¼c	174s
May 9	48c	47½c	218s 6d
May 16	48c	45¾c	†215s
May 23	46c	43c	205s
May 30	48c	47¼c	230s
June 6	49c	47½c	234s
June 13	49c	47¾c	228s
June 20	49c	47½c	225s
June 27	50c	48½c	237s

* May. † August.

During the second quarter, shipments of orange shellac from Calcutta to the United States, in terms of packages of 164 pounds net, each, were as follows:—

	Packages	
	1927.	1926.
April	16,577	15,237
May	12,179	15,761
June	11,274	15,718
Totals	40,030	46,716

Record of the Third Quarter

By the beginning of the third quarter of the year, the lines of operations had been well defined in the Calcutta and London markets. Two of the world's largest shippers from the Calcutta market were on opposite sides. The one that was a "bull" backed his convictions by the determination to purchase one of the largest stocks ever bought for speculation. Ultimately the other, the bear, interest was unexpectedly back of a movement calculated to keep prices from advancing to the extent expected by the "bull." So far as the United States was concerned, it appeared that there were more operators, importers, manufacturers and dealers who chose to trail with the bear interest.

The third quarter of the year was given over to raids on the Calcutta and London markets. The important fact outside of mere developments in prices was that the bulls bought on all recessions in both the foreign markets, trading heavily in the October position.

The price trend throughout the period was downward. In New York T.N. opened July at 57c., held thereat throughout the month, and in the week of August 8 was down to 52c. per pound, there to remain for the balance of that month. September found the decline resumed promptly, the market opening at 51c. and ending the month at 49c. per pound. Calcutta was priced at 55c. in the beginning of July, which was low for the month. During the month it touched 57c., but ended at 55¾c. August opened up at 54½c. per pound, dropped to a low of 49c. in the second week of the month, recovered to 50c. and closed the period at 49¾c. The beginning of September caught the market in another decline, the opening price being 47c. High for the month was 47½c. and the low was 46c., which prevailed at the end of the month. London started trade in the August position at 254s. per hundredweight. During July the market there advanced to 265s., which was obtained during the last two weeks of the month. A break to 255s. came at the end of the month and the decline was followed by another to the basis of 225s. during the first week in August. The October position was first quoted during the second week, closing that week at 249s. The market was down to 239s. by the end of the period. In September, the October delivery sold as low as 227s. early in the month, advanced at one time to 235s., then to 238s., only to close at 228s. when buying was withdrawn.

Exports of orange shellac from Calcutta to the world during the first nine months of 1927 were 41,101 packages less than during the equivalent period in 1926. The comparative totals were 172,397 packages for nine months of 1927 and 213,498 packages for the equivalent period, 1926.

Shipments of orange shellac from Calcutta to the United States during the third quarter were 21,799 packages less than in the third quarter of 1926. They were 13,404 packages less than in the second quarter of 1927. The effect of the short Bysaki crop became more apparent as the quarter advanced and throughout the balance of the year the disparity between the exports of 1927 as compared with those of 1926 was to become more and more apparent. The movement to the United Kingdom was 14,026 packages more in 1927 than in 1926, the figures being 47,282 packages against 33,256 packages. The export to the Continent was 21,047 packages for 1927 as compared with 20,813 packages for 1926, a gain of 234 packages. Finally, the record shows a movement of 10,758 packages to all other ports in 1927 as against 17,401 packages for the first nine months of 1926, a decrease of 6,642 packages.

Operations on the part of American houses changed the aspect of London stocks in the third quarter and during the final three months of the year the change was even more marked. The London stocks for the third quarter were as follows, the figures being those recorded on the first of each month:—

	Shellac in packages	
	All kinds.	Orange.
July	21,298	19,698
August	25,586	24,111
September	20,063	18,775

The following tabulation quotes spot prices in cents per pound, Calcutta prices on a c. and f. basis, New York, and London quotations on a basis of shillings per hundredweight:—

T. N. Prices—Third Quarter

Reporter Issue of—	New York. Per lb.	Calcutta. Per lb.	London. Per cwt.
July 4	57c	55c	254s
July 11	57c	55¼c	252s 6d
July 18	58c	57c	265s
July 25	57c	55¾c	265s
August 1	57c	54½c	255s
August 8	54c	49¾c	225s
August 15	52c	49c	*249s
August 22	52c	50c	244s
August 29	52c	49¾c	239s
September 5	51c	47c	227s
September 12	51c	47½c	235s
September 19	51c	47½c	238s
September 26	49c	46c	228s

* October.

During the third quarter shipments of orange shellac from Calcutta to the United States, in terms of packages of 164 pounds net, each, were as follows:—

	Packages	
	1927.	1926.
July	15,009	19,086
August	5,785	11,382
September	5,832	17,977
Totals	26,626	48,425

Record for the Fourth Quarter

Though basically and statistically one of the strongest shellac markets of all time had prevailed since underproduction in the Bysaki crop had been confirmed, the curtailment of consuming demand had in part offset the serious shortage in production in Calcutta as well as modified somewhat the immediate effect of extensive speculation in the article in all markets.

It was in the last quarter that the two strongest positions of the whole year influenced the market most. The October position has been already referred to. The December position carried all the interest of those of bullish tendencies during the last quarter. The net result of the buying by one large American interest was to concentrate in one quarter virtually all the shellac sold for the October and December positions. This quarter took practically every pound of October and by the first of December had strings on virtually every pound of shellac tenderable against T. N. contracts for December delivery. There was an unquestioned short interest in the London market. The December position closed at 260s. per hundredweight, an advance of 32s. 6d. since the Reporter of October 17.

The condition of demand for months bordered on hand-to-mouth volume while the largest operators awaited the entrance of buyers forced in to cover requirements on a major scale. The first sign of such a development in the last quarter of the year came early in November. Demand then developed was for spot, or nearby arrivals, and this showed that virtually all the shellac for December delivery was under control and that but small quantities of the January arrivals remained unbought.

The effect was a boom to spot prices that for suddenness eclipsed the advance that had begun in May. By the end of the first week in December the spot price for T. N. hit 55c. per pound, compared with 46c. in the first week of October and 48c. and 49c. during November. The market ended the year at 55c. Calcutta early in October stood at 42¾c. per pound, reached 47c. by the middle of November, started December at 48¼c. and sold as high as 52c. before the end of that month. It ended the year at 49½c.

Prices in London, of course, paralleled the movements in Calcutta and New York. The October delivery was priced at 222s. 6d. per hundredweight early in October. Trade shifted to the December position during the second week of the month and by the close of that week December had sold at 227s. 6d per hundredweight. During the week of October 17 the December delivery advanced to 240s. and by the close of the week of the 24th stood at 242s. 6d.

The bears hit the London market hard in November, driving the price of the December delivery down from 245s. to the basis of 241s. 6d. which was quoted November 25. The New York market during that period advanced 1c. and Calcutta scored a net rise also 1c. in degree.

Promptly with the advent of December came the need of stocks to tender before the close of the position. Compulsion rested strong on the bears and the price in London was prompt to react to the pressure. Opening December at 250s. per hundredweight—an advance of 8s. 6d. over the November close—the delivery went as high as 257s. 6d. reached December 8. On December 9 the market had eased back to 255s. and by December 16 248s. was named. The position closed December 21 at 260s.

London stocks during the last quarter of the year were as follows on the first of each month:—

	Shellac in packages	
	All kinds.	Orange.
October	20,063	18,775
November	10,678	9,858
December	10,159	9,538
January 1, 1928	15,373	14,214

The following tabulation quotes spot prices in cents per pound, Calcutta prices on a c&f basis, New York, and London quotations on a basis of shillings per hundredweight:

T.N. Prices—Fourth Quarter

Reporter Issue of—	New York. Per lb.	Calcutta. Per lb.	London. Per cwt.
October 3	46c	42⅝c	222s 6d
October 10	48c	44¼c	240s
October 17	48c	45c	*227s 6d
October 24	47c	41½c	240s
October 31	48c	45½c	242s 6d
November 7	48c	45c	245s
November 14	49c	47c	243s
November 21	49c	47½c	243s
November 28	49c	46c	241s 6d
December 5	53c	48¾c	250s
December 12	55c	52c	255s
December 19	55c	51½c	248s
December 26	55c	49½c	260s
January 2	54c	49¼c	†225s

* December. † March.

During the fourth quarter, shipments of orange shellac from Calcutta to the United States in terms of packages of 164 pounds net, each, were as follows:

Shipments to the United States
(Orange Shellac)

	Packages	
	1927.	1926.
October	3,175	11,185
November	6,180	14,414
December	8,156	11,664
Totals	17,511	37,263

Total exports of orange shellac from Calcutta to the world for the entire year were as follows:—

	Packages	
	1927.	1926.
United States	113,223	179,291
United Kingdom	71,497	86,887
Continent	50,903	42,646
Other parts	16,070	22,193
Totals	231,693	391,019

The situation at the end of the year was one of much uncertainty concerning the feature. Virtually all the shellac available for consumption in the United States during the January-March period was under control of hardly more than two factors. Estimates varied as to how much would be available, and one quarter was firm in the view that 30,000 packages was an outside figure, aside from, possibly, the stock of one bleacher. There was much "guessing" as to whether the heavy buyer of the December delivery would also be "long" of the March when that position should close, although the information was that shortly after the middle of December that firm owned not a pound of shellac for March delivery.

The future of prices seemed to depend principally on how demand might broaden with the turn of the year. The idea of most factors was that fairly strong undertones were likely to prevail for some time to come.

Importations of shellac, all kinds included, into the United States during the calendar year 1927, with comparative figures for 1926, supplied by the United States Department of Commerce, were as follows:—

	Pounds	
	1927.	1926.
January	2,851,593	2,380,015
February	1,332,792	2,155,709
March	2,441,983	3,853,692
April	1,361,016	2,340,595
May	2,386,769	2,806,768
June	2,408,510	1,834,787
July	2,353,855	3,388,449
August	1,907,818	2,338,338
September	2,687,526	3,598,286
October	2,569,991	2,268,519
November	1,251,141	2,263,953
December	.....	2,066,491
Totals	23,552,994	31,295,602

Gums, Shellacs, Waxes: Record of Prices

Gums

Aloe, Curacao, Cases

November 22, 1871, the price was 20c. to 21c.; October 18, 1881, 13c. to 15c.; 1891, 2½c. to 5c.; 1901, 3⅝c. to 4¼c.; 1911, 7¼c. to 7½c.; 1913, 8c. to 8½c.; 1918, April, 11c.

(In cases)

	1926. Per pound		1927. Per pound	
	H.	L.	H.	L.
January	$0.10½	$0.09½	$0.10	$0.10
February	.09	.09	.10½	.10
March	.09½	.09	.11	.10
April	.10	.09½	.11½	.11
May	.09½	.09½	.12	.11⅝
June	.09½	.09	.12	.12
July	.09	.09	.12	.12
August	.09	.09	.12	.10½
September	.09	.09	.10½	.10½
October	.09	.09	.10½	.10½
November	.09½	.09	.10½	.10½
December	.10	.09½	.10½	.10½
Year	.10½	.09	.12	.10

Eighteen Years' Prices

	Per pound	
	H.	L.
1927	$0.12	$0.10
1926	.10½	.09
1925	.11	.10
1924	.11	.07½
1923	.10½	.06
1922	.07½	.06
1921	.08½	.06
1920	.10	.08½
1919	.10	.08
1918	.11	.08
1917	.09½	.08
1916	.14	.09
1915	.15	.11½
1914	.16	.08
1913	.11	.06½
1912	.11½	.07¾
1911	.08	.06½
1910	.08¾	.06¾

Arabic, Cleaned Amber, Sorts

October 18, 1871, the price was 19c. to 21c.; 1881, 10½c. to 12½c.; 1891, 23c. to 25c.; 1901, 13c. to 26c.; 1911, 11½c. to 11¾c.; 1913, 8½c. to 9c.; 1917, October, 33c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13¼	$0.12¾	$0.11½	$0.11
February	.12¾	.12¾	.11	.10½
March	.12¾	.12¾	.10½	.10¾
April	.12¾	.12½	.10½	.10
May	.12	.12½	.10¼	.10
June	.12	.11½	.10¼	.10¼
July	.11½	.11½	.10¼	.10¼
August	.11½	.11½	.10¼	.10¼
September	.11¾	.11¾	.10¼	.10¼
October	.11½	.11½	.10½	.10¼
November	.11½	.11½	.10¾	.10½
December	.11½	.11½	.10¾	.10¾
Year	.13¼	.11½	.11½	.10

Asafetida, Lump

October 18, 1871, the price was 55c.; 1881, 13c. to 14c.; 1891, 11c. to 15c.; 1901, 26c. to 30c.; 1911, 75c. to $1.25; 1913, 30c.; 1919, June, $6.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.30	$0.25	$0.31	$0.30
February	.28	.25	.31	.31
March	.28	.27	.31	.31
April	.27	.26	.31	.31
May	.26	.26	.31	.30
June	.25	.25	.30	.30
July	.25	.25	.30	.30
August	.28	.25	.30	.30
September	.28	.27	.29	.29
October	.29	.27	.29	.29
November	.29	.29	.29	.29
December	.30	.30	.29	.29
Year	.30	.25	.31	.29

Camphor, American, Refined, Lump

October 18, 1871, the price was 69½c. to 70c.; 1881, 24½c. to 25c.; 1891, 43c.; 1901, 57c. to 57½c.; 1911, 45c. to 46c.; 1913, 42¼c.; 1919, September, $3.30.

	Per barrel			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.84	$0.84	$0.79	$0.72
February	.84	.84	.72	.72
March	.84	.84	.72	.72
April	.84	.84	.72	.72
May	.84	.84	.72	.72
June	.84	.84	.72	.72
July	.79	.79	.72	.72
August	.79	.79	.72	.62
September	.79	.79	.62	.62
October	.79	.79	.62	.62
November	.79	.79	.62	.62
December	.79	.79	.62	.62
Year	.84	.79	.79	.62

Eighteen Years' Prices

	Per pound	
	H.	L.
1927	$0.79	$0.62
1926	.84	.79
1925	.84	.80
1924	.93	.80
1923	.96	.93
1922	.96	.90
1921	1.00	.75
1920	3.30	1.00
1919	3.30	2.50
1918	1.34½	.76½
1917	.89½	.74½
1916	.86½	.42
1915	.44½	.41
1914	.59½	.41
1913	.44	.42
1912	.44	.44
1911	.49½	.42
1910	.45	.42

NOTE.—Owing to the American camphor refiners' inability to secure supplies of crude beyond that necessary to meet their government contracts, they withdrew all quotations in October, 1918, when the influenza epidemic forced the rise in Japanese refined camphor to $4 per pound.

Camphor, Japan, Refined, Slabs

October 18, 1871, the price was 69½c. to 70c.; 1881, 24½c. to 25c.; 1891, 43c.; 1901, 57c. to 57½c.; 1911, 45c. to 46c.; 1913, 42½c. to 46c.; 1919, October, $3.65.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.73	$0.71½	$0.72	$0.68
February	.75	.73	.68	.68
March	.80	.75	.68	.66
April	.79	.79	.66	.65
May	.79	.78	.65	.65
June	.76	.75	.65	.64
July	.74	.72	.65	.64
August	.72	.72	.64	.64
September	.72	.72	.64	.63
October	.72	.72	.63	.60
November	.72	.72	.62	.60
December	.72	.72	.60	.60
Year	.80	.71½	.72	.60

Myrrh

October 18, 1871, the price was 42c. to 46c.; 1881, 27c. to 30c.; 1891, 16c. to 40c.; 1901, 12c. to 25c.; 1911, 13c. to 18c.; 1913, 13c. to 16c.; 1919, February, $1.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.25	$0.25	$0.25	$0.24
February	.25	.25	.28	.24
March	.25	.24	.28	.28
April	.24	.24	.28	.28
May	.24	.24	.28	.28
June	.24	.24	.28	.28
July	.24	.24	.28	.28
August	.24	.23	.27	.27
September	.23	.23	.30	.27
October	.23	.23	.37	.30
November	.23	.23	.38	.37
December	.25	.25	.60	.38
Year	.25	.23	.60	.24

Tragacanth, Aleppo, No. 1

October 18, 1871, the price was 60c. to 82½c.; 1881, 40c. to 75c.; 1891, 24c. to 48c.; 1901, 60c. to 65c.; 1911, 35c. to 77c.; 1913, $1.25 to $1.30; 1920, March, $5.25.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.65	$1.65	$1.55	$1.55
February	1.65	1.65	1.55	1.55
March	1.65	1.65	1.55	1.55
April	1.65	1.65	1.55	1.55
May	1.65	1.65	1.55	1.55
June	1.55	1.55	1.55	1.55
July	1.55	1.55	1.55	1.55
August	1.55	1.55	1.55	1.55
September	1.55	1.55	1.55	1.55
October	1.55	1.55	1.55	1.55
November	1.55	1.55	1.55	1.55
December	1.55	1.55	1.55	1.55
Year	1.65	1.55	1.55	1.55

Waxes

Beeswax, African

May 29, 1872, the price was 31c. to 32c.; October 18, 1881, 23c. to 24c.; 1891, 22c. to 24c.; 1901, 33c. to 35c.; 1911, 32c. to 33c.; 1913, 34c. to 35c.; 1918, November, 47c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.41	$0.40	$0.40	$0.40
February	.41	.41	.40	.39
March	.41	.41	.39	.38
April	.41	.41	.38	.38
May	.41	.41	.38	.38
June	.41	.41	.38	.38
July	.41	.40	.38	.38
August	.40	.39	.38	.37
September	.39	.38	.37	.35
October	.38	.37	.38	.36
November	.39	.37	.36	.36
December	.40	.39	.36	.36
Year	.41	.37	.40	.35

Beeswax, Refined

May 29, 1872, the price was 60c. to 65c.; October 18, 1881, 30c. to 41c.; 1891, 40c. to 45c.; 1901, 38c. to 50c.; 1911, 34c. to 36c.; 1913, 36c. to 37c.; 1918, November, 50c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.45	$0.45	$0.44	$0.44
February	.45	.45	.44	.43
March	.46	.45	.43	.43
April	.47	.46	.43	.43
May	.47	.47	.43	.43
June	.47	.47	.43	.43
July	.47	.45	.43	.43
August	.45	.45	.43	.43
September	.45	.45	.43	.41
October	.44	.44	.42½	.41
November	.44	.44	.42½	.42½
December	.44	.44	.42½	.42½
Year	.47	.44	.44	.41

Carnauba, N.C. No. 3

January 8, 1872, the price was 14c. to 16c.; October 18, 1891, 15c. to 20c.; 1901, 12c. to 13½c.; 1911, 37c. to 38c.; 1913, 33c. to 33½c.; 1918, June, 81c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.36	$0.36	$0.36	$0.33
February	.37	.35	.34	.33
March	.37	.36	.34	.31½
April	.36	.36	.31½	.30½
May	.36	.36	.30	.30
June	.39	.37	.31½	.29
July	.39	.37½	.31½	.31
August	.37½	.37	.31	.30
September	.38	.37	.30	.29½
October	.37	.37	.30	.28
November	.37	.37	.28	.28
December	.36	.36	.28	.28
Year	.39	.35	.36	.28

Japan

January 12, 1881, the price was 15c. to 16c.; October 18, 1881, 12½c. to 13c.; 1891, 9c. to 10c.; 1901, 7¼c. to 7½c.; 1911, 8½c. to 8¾c.; 1913, 9c. to 9¼c.; 1918, September, 27½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.17½	$0.17	$0.34	$0.24
February	.17¼	.17	.24	.19
March	.17¼	.17¼	.19	.18½
April	.17¼	.17¼	.18½	.18
May	.17¼	.17	.19½	.18
June	.17	.17	.19½	.18½
July	.17	.17	.19	.18½
August	.18½	.17½	.18½	.18½
September	.18½	.18½	.18½	.18
October	.18½	.18	.18	.17¼
November	.25	.18	.18	.18
December	.25	.25	.19	.19
Year	.25	.17	.34	.17¼

Shellac

Shellac, D.C.

August 22, 1877, the price was 26c.; 1881, 38c. to 39c.; 1891, 30c. to 31c.; 1901, 33c. to 34c.; 1911, 22c. to 23c.; 1913, 27c. to 28c.; 1920, July, $1.73.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.75	$0.68	$0.60	$0.60
February	.68	.65	.60	.60
March	.65	.65	.60	.58
April	.65	.62	.58	.55
May	.58	.58	.62	.55
June	.58	.58	.63	.61
July	.58	.55	.71	.71
August	.55	.52	.71	.66
September	.61	.55	.66	.66
October	.60	.60	.60	.60
November	.62	.60	.63	.60
December	.62	.60	.68	.64
Year	.75	.52	.71	.55

Shellac, T.N.

October 18, 1871, the price was 31c. to 42c.; 1881, 29c. to 30c.; 1891, 21c. to 23c.; 1901, 23c. to 25c.; 1911, 14c. to 14½c.; 1913, 21½c. to 23c.; 1920, January, $1.60.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.45	$0.39	$0.44	$0.42
February	.36	.32	.42	.42
March	.33	.32	.42	.38
April	.32	.26	.37	.37
May	.25½	.24½	.48	.38
June	.27¼	.25	.50	.49
July	.27	.27	.58	.57
August	.27	.26½	.57	.52
September	.38	.34	.51	.49
October	.40	.39½	.48	.46
November	.48	.40	.49	.48
December	.45	.43	.55	.53
Year	.48	.24½	.58	.37

Twenty-seven Years' Prices

	Per pound	
	H.	L.
1927	$0.58	$0.37
1926	.48	.24½
1925	.62	.45
1924	.65	.52
1923	.81	.51
1922	.82	.54
1921	.70	.44
1920	1.60	.65
1919	1.50	.46
1918	.68	.57
1917	.60	.39
1916	.39	.20
1915	.21	.13½
1914	.21	.14
1913	.23½	.16½
1912	.16½	.13½
1911	.18	.13½
1910	.19½	.14
1909	.20½	.14
1908	.29	.20
1907	.48	.26
1906	.50	.42
1905	.46	.42
1904	.52	.42
1903	.52¾	.26½
1902	.40	.24
1901	.30	.14
1900	.15	.14½

Shellac, Bleached, Bone Dry

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.54	$0.48	$0.52	$0.50
February	.45	.41	.54	.50
March	.43	.40	.50	.45
April	.40	.38	.47	.45
May	.37	.32½	.57	.47
June	.36	.33	.59	.59
July	.37	.36	.66	.65
August	.37½	.35	.65	.60
September	.40	.47	.60	.58
October	.50	.49	.55	.55
November	.58	.50	.57	.54
December	.58	.52	.62	.60
Year	.58	.32½	.66	.45

Twenty Years' Prices

	Per pound	
	H.	L.
1927	$0.66	$0.45
1926	.58	.32½
1925	.73	.55
1924	.73	.63
1923	.95	.63
1922	.94	.72
1921	.80	.53
1920	1.75	.80
1919	1.70	.56
1918	.79	.64
1917	.60	.39½
1916	.31	.34
1915	.24	.17½
1914	.27	.18½
1913	.27	.21
1912	.21	.19
1911	.26	.19
1910	.26	.20
1909	.25	.20
1908	.28	.20

Lead and Zinc in 1927

Smelter production of lead showed a small increase in 1927, according to a preliminary report by the Department of Commerce. Smelter production of zinc diminished.

Lead

The output of primary domestic desilverized lead in 1927 was about 375,000 tons; of soft lead about 240,000 tons, and of desilverized soft lead about 61,000 tons, making a total output from domestic ores of about 676,000 tons of refined lead, according to statistics compiled by the Bureau of Mines. Corresponding figures in 1926 were 366,413 tons of desilverized lead, 258,565 tons of soft lead and 55,707 tons of desilverized soft lead, making a total of 680,685 tons. The output of lead smelted and refined from foreign ore and bullion was about 131,000 tons, as compared with 118,256 tons in 1926. The total primary lead smelted or refined in the United States in 1927 was thus about 807,000 tons, as compared with a total of 798,941 tons in 1926, a gain of about 1 percent. The output of antimonial lead in 1927 was about 16,000 tons, as compared with 22,524 tons in 1926.

Imports of refined pig lead for eleven months amounted to 2,442 tons, of which 1,764 tons came from Mexico. The base bullion imported during the same period contained 109,848 tons of lead, almost wholly from Mexico. The exports of lead of foreign origin amounted to 111,835 tons, as compared with 67,660 tons exported in the entire year 1926. Exports of lead of domestic origin amounted to 2,233 tons, as compared with 4,276 tons exported in 1926. Exclusive of stocks of lead at smelters and refineries and estimating the amount of lead exported with benefit of drawback, for which figures are not available, it is calculated that the new supply of lead made available for consumption in 1927 was about 685,000 tons, as compared with 717,653 tons in 1926.

Zinc

The outputt of primary metallic zinc from domestic ores in 1927 was about 575,000 tons and that from foreign ores was about 13,000 tons, a total of 588,000 tons, as compared with 611,991 tons from domestic ores and 6,431 tons from foreign ores, a total of 618,422 tons in 1926. In addition to the output of primary zinc there was an output of about 45,000 tons of redistilled secondary zinc, as compared with 40,799 tons in 1926, making a total supply of distilled and electrolytic zinc in 1927 of about 633,000 tons, composed of 192,000 tons of high-grade and intermediate, 71,000 tons of select and brass special and 370,000 tons of prime western zinc. Of the total output of primary zinc in 1927 about 117,000 tons was made in Oklahoma, 103,000 tons in Illinois and 103,000 tons in Pennsylvania. The remainder was made in Arkansas, Indiana, Kansas, Montana, Texas and West Virginia.

Imports of slab zinc for eleven months amounted to only 24 tons. The exports of slab zinc made from domestic and foreign ores amounted to 48,273 tons, including 3,625 tons of rolled zinc. The stock of zinc reported at smelters November 30 was about 45,000 tons. No slab zinc was reported in warehouse. The apparent consumption of primary zinc in 1927 was about 522,000 tons, as compared with 557,026 tons in 1926.

The total number of retorts at the 24 zinc smelters that operated during all or a part of the year was about 120,000. Of that number, about 73,000 were reported in operation at the end of November and about 73,000 were expected to be in operation at the end of the year. At the end of 1926 there were 89,496 retorts in operation at these 24 plants.

Lime Sales in 1927

Lime sold by producers in the United States in 1927 amounted to 4,337,000 short tons, valued at $38,210,000, according to estimates furnished by lime manufacturers to the United States Bureau of Mines, Department of Commerce. This is a decrease of 5 percent in quantity and 8 percent in value as compared with sales in 1926. Sales of hydrated lime, which are included in these figures, amounted to 1,562,000 tons, valued at $14,300,000, a decrease of 3 percent in quantity and 6 percent in value. The average unit value of all lime showed a decrease from $9.11 a ton in 1926 to $8.81 in 1927, and that of hydrated lime a decrease from $9.45 a ton in 1926 to $9.15 in 1927.

Conditions in the lime industry during 1927 were reported as unsettled and unsatisfactory, especially for the last six months of the year. Demand for building, chemical and agricultural lime was irregular, and although in general it was reported as less or the same as in 1926, there were many reports of good or increased demand.

Ohio, the leading State, showed a decrease of 7 percent in total quantity of sales and 8 percent in sales of hydrated lime. Pennsylvania, which ranked second, showed a decrease of 2 percent in total sales. Of the 23 States in which more than 25,000 tons were sold, only 8 showed increased sales.

Sales of lime for building in 1927 are estimated at 2,200,000 tons; for chemical uses, 1,847,000 tons, and for agriculture, 290,000 tons.

Ceylon Citronella and Lemongrass Oils Trade

Although the production of citronella oil is a fairly important industry in Ceylon, so little lemongrass oil is distilled there that separate statistics are not reported.

According to the latest figures reported to the Department of Commerce, 36,386 acres are devoted to the growth of citronella grass, and whatever small acreage is under cultivation with lemongrass is believed to be incorporated in this figure.

Both citronella and lemongrass grow in ordinary soil, but thrive best in a moist, hot atmosphere. The number of crops in a year and the yield of oil are largely dependent on rainfall. Cutting may be done four times a year, but the average is generally three, and in dry years only two cuttings are possible. Distillation is carried on throughout the year, but in the dry months, from February to April, there is a marked slowing-up of operations and occasionally a complete shutdown. Distillation is principally established in Ceylon, but adulteration has unfavorably affected the reputation of the product originating there.

The cultivation of the grasses is entirely confined to the southern province, chiefly in the Matara and Hambantota districts.

No date of carryover stocks are available, but with present low prices there are said to be considerable stocks of citronella oil in Ceylon.

The following table shows the quantities and values of the exports of citronella and lemongrass oils for the past ten years:—

Year.	Quantity, Pounds.	Value, Rupees.
1917	1,197,507	1,173,164
1918	1,030,167	875,060
1919	992,850	896,243
1920	1,022,809	1,141,528
1921	1,160,555	1,093,817
1922	1,299,889	1,638,242
1923	1,121,271	2,130,283
1924	1,433,381	2,941,291
1925	1,415,639	2,259,465
1926	1,431,351	1,774,326

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Paint and Varnish REMOVERS

PATENTED Nov. 1, Oct. 18, Mar. 8, Feb. 22, Feb. 22, Feb. 22, Jan. 4, Jan. 4, 1927; Nov. 9, Nov. 9, Aug. 17, 1926; June 24, June 24, June 24, 1924; Feb. 27, Feb. 27, Feb. 27, 1923; Feb. 14, 1922; Oct. 25, 1921; Jan. 13, 1920; July 22, June 10, May 6, 1919; Reissued Dec. 10, Aug. 6, 1918; Aug. 7, June 12, 1917; Oct. 24, July 4, July 4, June 6, Feb. 22, Feb. 22, Feb. 1, Jan. 11, Jan. 11, 1916; Nov. 16, July 27, July 27, July 27, July 27, July 27, July 20, July 13, July 13, June 15, June 15, June 15, May 25, May 11, Mar. 2, Feb. 23, 1915; Nov. 24, Oct. 20, Oct. 20, Oct. 20, Oct. 20, July 7, June 16, May 5, Jan. 13, 1914; Dec. 30, Dec. 30, Nov. 25, July 29, July 29, July 8, July 1, Jan. 21, Jan. 21, Jan. 21, Jan. 7, Jan. 7, 1913; May 28, Mar. 12, Feb. 13, Jan. 16, Jan. 9, 1912; Aug. 15, Aug. 8, July 11, June 6, Feb. 28, Feb. 28, Feb. 28, Feb. 28, Feb. 14, Jan. 24, 1911.

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Paint and Varnish Materials: Market Review

The volume of sales in paint and varnish materials during 1927 was reported to be slightly above that in the preceding year on a number of lines, but volume was acquired in many instances at the expense of profits. The Reporter's index number for eleven typical paint and varnish materials registers a drop of 5.2 points over the year.

Competition was keen in many branches of the market during the greater part of the year and, because of this, selling prices of the various materials did not always show the usual reactions to price changes in raw materials. On a few lines, notably some of the dry colors, competition was so sharp that manufacturers declared that there was no margin of profit whatever. The colors in this position were being used in most instances as "leaders," to bring in volume on other colors which might be sold profitably. Toward the close of the year there was a perceptible change in market sentiment. Sellers appeared to realize that there was little to be gained through acquisition of profitless volume, and the tendency to go out for competitive business at the expense of prices was by no means marked. A little price cutting developed during the latter part of the closing quarter when makers started writing 1928 contracts for iron blues, chrome yellows and one or two other colors, but the campaign was of relatively short duration, and prices moved up again once the large tonnage business was out of the way. In general, it could be safely stated that the market situation with respect to price shading was better than has been the case for several years back.

In the pigments group the market was practically free of price shading throughout the year. Pigment manufacturers had had a taste of the unfavorable aftermath of such a campaign during the preceding year, and it appeared that market conditions had taken on considerable stability.

Price trends were toward lower levels on the more important materials throughout the year and, because of this, consuming manufacturers showed a pronounced inclination to operate on as small a scale as consistent with their factory operations. Spot buying replaced the usual contract operations in many instances, and there was an utter absence of speculative buying interest.

The comparative stability of the market for the various materials, and the freedom from violent price fluctuations, enabled manufacturers of paints, stains, varnishes, enamels, etc., to maintain their list prices on a firm basis over the year. This stability naturally made for a good buying movement on the part of distributors, and, based on the showing of the first six months of 1927, it appeared that volume in finishes for the entire year would show a sizeable increase over that for 1926 when the final figures are in.

The general prosperity of leading industries was reflected by a heavy business in industrial paints during the year. Manufacturers in various fields took advantage of their summer and year-end shut-downs to have their plants repainted and touched up, and the result was a large volume of business in this class of paints and finishes.

One disappointing feature of the year was the slackening of operations in the automotive field. The protracted delay of the Ford Motor Company in bringing out its new models resulted in a marked curtailment of output on the part of a number of automobile makers in the competitive class with Ford, aside from the absence of the Ford company from the paint and lacquer field for a good part of the year, no small factor in itself. Current indications are that the production of motor vehicles will go over the 5,000,000 mark this year, indicating a heavy consumption of finishes. One new development which may have an important bearing on the consumption of paint and varnish products in the automotive industry is the action of a prominent manufacturer in giving his entire car, including the chassis, a lacquer finish, as a protective measure, something that has never before been done by any of the leading manufacturers.

Consumption of pyroxylin lacquers showed continued increase during the year, stimulated to a large extent by further development of the brushing lacquer business by various manufacturers. Manufacturers of nationally advertised brands devoted considerable of their advertising space to this finish, and in addition in many instances put missionary men in the field to demonstrate their finishes in retail stores.

Construction Near Record

The volume of construction in 1927 was the second highest in the history of the country, according to the Dodge report. Contracts let on new building and engineering work in the 37 states east of the Rocky Mountains during the past year reached a total of $6,303,055,100, which was a drop of only 1 percent from the record total of 1926 and an increase of 5 percent over the total for the year 1925. For the entire country the total 1927 construction volume was estimated at a little over $6,800,000,000, being a loss of 3 percent from 1926.

There was $477,363,800 worth of new construction started in December in these 37 states, which was a gain of 3 percent over the total for the preceding month and a drop of 11 percent from the total for December, 1926. Included in the December record were:—$207,280,600, or 43 percent of all construction, for residential buildings; $92,657,300, or 19 percent, for public works and utilities; $86,933,100, or 18 percent, for commercial buildings; $29,988,800, or 6 percent, for industrial projects; and $23,247,600, or 5 percent, for educational projects. Contemplated construction projects were reported in this territory to the amount of $988,915,100 in December. This figure shows gains of 20 percent over the amount reported in November, 1927, and 9 percent over the amount reported in December, 1926.

December construction contracts amounted to $128,890,000 in New York State and Northern New Jersey. This total was almost the same as the amount ($129,313,800) reported in November, 1927, but was 43 percent under the record for December, 1926. Analysis of the December building and engineering record showed the following important classes of work:—$75,133,200, or 58 percent of all construction, for residential buildings; $19,755,800, or 15 percent, for commercial buildings; $17,408,200, or 13 percent, for public works and utilities, and $4,240,000, or 3 percent, for educational projects. During the year 1927 there was $1,684,445,300 worth of contracts let on new building and engineering work in this district, being a loss of 5 percent from the total ($1,775,060,200) for the year 1926. New work contemplated in New York State and Northern New Jersey in December reached a total of $236,081,300, which was a gain of 68 percent over the total for November of this year, but a loss of 7 percent from December, 1926.

The New England States had $30,862,600 in contracts for new construction work during December. The above figure showed a loss of 27 percent from the total for November, 1927, and was 7 percent less than the total for December, 1926. Included in the month's construction record for this district were the following items of note:—$14,955,600, or 49 percent of all construction, for residential buildings; $6,748,300, or 22 percent, for public works and utilities; $2,575,800, or 8 percent, for commercial buildings, and $1,852,400, or 6 percent, for hospitals and institutions. The year 1927 closed with a total construction volume of $412,767,300, being a loss of 6 percent from the amount ($441,183,100) for the previous year. Contemplated construction planned in the New England States in December amounted to $50,597,000, which was a gain of 25 percent over the amount reported in December, 1926, but was a loss of 12 percent from the amount reported in November, 1927.

Building and engineering contracts were awarded last month to the amount of $45,572,800 in the Middle Atlantic States (Eastern Pennsylvania, Southern New Jersey, Maryland, Delaware, District of Columbia and Virginia). The above figure showed a drop of 5 percent from the total for November of this year and was 2 percent under the total for December, 1926. Analysis of the December construction record for this section showed the following items of importance:—$23,575,500, or 52 percent of all construction, for residential buildings; $7,402,300, or 16 percent, for commercial buildings; $6,430,600, or 14 percent, for public works and utilities, and $2,526,000, or 6 percent, for educational projects. New construction started in these states during the year 1927 reached a total of $721,148,300, which was a gain of 5 percent over the amount started in the year 1926. contemplated new work reported in the Middle Atlantic States in December amounted to $138,385,400. This figure showed an increase of 51 percent over the amount reported in December, 1926, but was 3 percent under the total for November of this year.

December construction contracts let in the Pittsburgh District (Western Pennsylvania, West Virginia, Ohio and Kentucky) amounted to $42,458,800. This figure was almost the same as the amount ($42,618,300) reported in November, 1927, but was 5 percent less than the total for December, 1926. The month's building and engineering record included the following important classes of work:—$13,745,900, or 32 percent of all construction, for residential buildings; $13,474,900, or 32 percent, for public works and utilities: $6,163,800, or 15 percent, for educational projects, and $3,185,100, or 8 percent, for commercial buildings. Total building and engineering work started in these states during the past year amounted to $758,134,500, as compared with $741,368,100 for the year 1926, being an increase of 2 percent. New work contemplated in the Pittsburgh District in December reached a total of $65,739,200. This total showed a loss of 52 percent from the amount reported in the preceding month and was 7 percent less than the total for December, 1926.

New construction started in December in the Central West (Illinois, Indiana, Iowa, Wisconsin, Southern Michigan, Missouri, Kansas, Oklahoma and Nebraska) amounting to $164,258,000 was the highest December contract total yet on record for this territory. It was 35 percent ahead of the total for November, 1927, as well as 29 percent over the total for December, 1926. The award of a single contract amounting to $25,000,000 in the commercial class helped to swell the month's record. Analysis of the December building record in the Central West showed the following items of note:—$65,078,100, or 40 percent of all construction, for residential buildings; $47,998,600, or 29 percent, for commercial buildings; $25,993,700, or 16 percent, for public works and utilities, and $8,705,000, or 5 percent, for social and recreational projects. During the year 1927 there was $1,812,848,700 worth of contracts let on new building and engineering work in the Central West, which was an increase of 9 percent over the total ($1,669,042,800) for the year 1926.

The Northwest (Minnesota, the Dakotas and Northern Michigan) had $3,032,600 in contracts for new construction work during December. The above figure showed losses of 39 percent from the preceding month and 12 percent from December, 1926. Included in the December building record were:—$1,412,700, or 47 percent of all construction, for public works and utilities; $1,131,000, or 37 percent, for residential buildings, and $282,400, or 9 percent, for commercial buildings. The year 1927 closed with a total construction volume of $83,816,700, which was a loss of 18 percent from the total for the previous year. Contemplated new work as reported in December in the Northwest reached a total of $8,053,800, which was a drop of 23 percent from the amount reported in November, 1927, and December, 1926.

December construction contracts in the Southeastern States (the Carolinas, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas and Nebraska) amounted to $49,092,600. The month's record showed an increase of 26 percent over the total for December, 1926, but was 8 percent less than the total for November, 1927. Included in the December building record for this territory were:—$18,725,400, or 38 percent of all construction, for public works and utilities; $11,372,200, or 23 percent, for industrial projects; $8,827,500, or 18 percent, for residential buildings, and $4,085,500, or 8 percent, for commercial buildings. New construction started in the Southeastern States in 1927 reached a total of $610,789,300, being a loss of 16 percent from the total for the year 1926. Contemplated new construction reported in this district during December amounted to $64,162,500. This figure showed a gain of 3 percent over the amount reported in November, 1927, but was 11 percent under the total for December, 1926.

BUILDING TYPES	N. EASTERN STATES	N. ATLANTIC STATES	S. EASTERN STATES	S. WESTERN STATES	MIDDLE STATES	WESTERN STATES	U.S.A.
Automotive	$16,702,000	$68,716,000	$8,214,000	$17,554,000	$67,605,000	$18,640,000	$197,431,000
Banks	10,674,000	72,693,000	2,278,000	10,202.000	34,300,000	7,247,000	137,394,000
Apartments	10,437,000	347,500,000	13,862,000	22,400,000	186,400,000	72,230,000	652,829,000
Apartment Hotels	572,000	56,787,000	4,970,000	12,935,000	105,987,000	36,267,000	217,518,000
Club, Fraternal, etc.	10,557,000	46,287,000	2,937,000	15,000,000	86,742,000	14,440,000	175,963,000
Community and Memorial	3,146.000	13,400.000	580,000	5,265 000	41,760 000	10,645,000	74,796,000
Churches	19,860,000	48,740,000	12,635,000	20,900,000	71,367,000	37,640,000	211,142,000
*Dwellings (Below $20,000)	19,780,000	76,730,000	8,700,000	16,360,000	49,400,000	26,372,000	197,342,000
Dwellings ($20,000 to $50,000)	11,420,000	69,210,000	7,935,000	12,150,000	37,610,000	24,640,000	162,965,000
Dwellings (Over $50,000)	8,700,000	44,935,000	6,720,000	11,345,000	31,210,000	16,660,000	119,570,000
Hotels	21,487,000	107,272,000	19,950,000	45,175,000	105,200,000	42,917,000	342,001,000
Hospitals	22,724,000	104,210,000	8 715,000	21,320,000	110,114,000	39,200,000	306,283,000
†Industrial	18,215,000	79,362.000	7,100.000	12,222,000	121,000,000	22,917,000	260,816,000
Office Buildings	26,376,000	139,674,000	9,854,000	57,473,000	263,413,000	87,720,000	584,510,000
Public Buildings	24,207,000	122,761.000	4.893,000	17,869,000	132,171,000	28,900,000	330,801,000
Schools	42,371,000	197,613,000	36,827,000	46,282,000	163,413,000	82,666,000	569,172,000
Stores	11,780,000	54,776,000	5,103,000	8.086,000	39,763,000	26,713,000	146,221,000
Theaters (All Types)	21,920,000	43,114,000	4,167,000	3,777,000	71,620,000	17,340,000	161,938,000
Welfare Y.M.C.A., etc.	10,140,000	41,614,000	4,700.000	5,731,000	38,246,000	6,143,000	106,574,000
TOTAL VALUE OF NEW BUILDINGS	$311,068,000	$1,735,394,000	$170,140,000	$362,046,000	$1,757,321,000	$619,297,000	$4,955,266,000

New Construction Under Architect's Specifications (As shown in above tabulation)	$4,955,266,000
*Small Dwellings Not Designed by Architects (Estimated about 80% of total	789,368,000
†Industrial Buildings Not Designed by Architects (Estimated 50% of total	260,816,000
Other Buildings Not Designed by Architects (Estimated at 10% of total after deducting above two classifications	499,678,000
TOTAL ESTIMATED EXPENDITURE FOR NEW BUILDINGS IN 1928	$6,505,128,000 (Not Including Public Works and Utilities)

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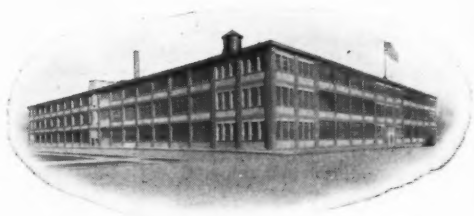

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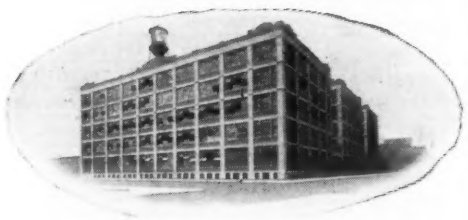

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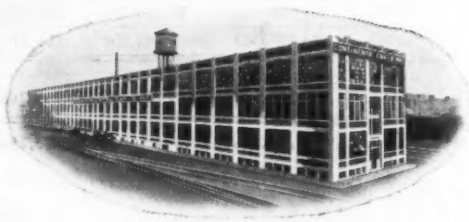

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Texas had $13,196,400 in contracts for new building and engineering work during December. The above total showed a drop of 42 percent from the amount reported in the preceding month and was 24 percent less than the total for December, 1926. The month's construction record contained the following items of note:—$4,833,800, or 37 percent of all construction, for residential buildings; $2,463,500, or 20 percent, for public works and utilities; $2,050,700, or 16 percent, for industrial projects, and $1,647,600, or 12 percent, for commercial buildings. During the past year there was $219,105,000 worth of contracts let on new construction work in Texas, being a loss of 6 percent from the total for the year 1926. New work contemplated in this state in December amounted to $36,002,900. This figure was 42 percent under the total for November, 1927, and was 8 percent less than the amount reported in December, 1926.

Comparative Values

Index numbers for 1927 compiled from eleven typical paint and varnish materials on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
157.2	157.8	153.2	153.2	152.0

Production and Sales

A slight gain in production of paints, varnishes, enamels, lacquers, japans and allied products was reported for the first half of 1927. Details of output for the closing half of the year are not available as yet. The industry was showing more inclination to cooperate with the census bureau in gathering statistics on production and sales, a total of 580 establishments reporting, against 549 in 1926. Of this total 103 reported the manufacture of pure white lead in oil; 183 combination or graded whites; 151 zinc oxide in oil; 342 other paste paints; 428 ready mixed and semi-paste paints; 352 varnishes, japans, lacquers, other than pyroxylin; and 145 pyroxylin varnishes or lacquers.

According to the data compiled in this report, production during the first six months of 1927 was as follows:—199,473,400 pounds of paste paints, comprising 132,795,900 pounds of pure white lead in oil, 15,877,800 pounds of combination or graded whites, 3,438,500 pounds of zinc oxide in oil, and 47,361,200 pounds of other paste paints; 50,662,100 gallons of ready-mixed and semi-paste paints, including enamels; 34,831,100 gallons of varnishes, japans and lacquers, other than pyroxylin; 14,929,000 gallons of pyroxylin (nitrocellulose) varnishes or lacquers, and allied products comprising paint and varnish removers, 522,400 gallons; stains (not varnish stains), 1,897,800 gallons; liquid fillers, 431,000 gallons; paste fillers, 7,553,500 pounds, and putty, 28,528,400 pounds.

The statistics for paints and varnishes for the first half of 1927 as compared with the second half of 1926 show a decrease of 6.1 percent for paste paints; an increase of 11 percent for ready-mixed and semi-paste paints, including enamels; a decrease of 3.9 percent for varnishes, japans, and lacquers, other than pyroxylin; and an increase of 16.2 percent for pyroxylin varnishes or lacquers.

Production in various classes by half years from 1922 up to June 30, 1927, is shown by the following table:—

	Thous. of pounds.	Thous. of gals.	
	Paste paints.	Ready-mixed and semi-paste paints.	Varnishes, japans. and lacquers.
1927—First half...	199,473	50,662	49,760
1926—Year	421,560	91,025	97,304
Second half.	212,537	45,623	49,086
First half...	209,023	45,402	48,218
1925—Year	465,285	99,709	82,017
Second half.	224,228	47,260	40,622
First half...	241,057	52,449	41,395
1924—Year	487,611	88,274	70,450
Second half.	233,867	43,152	34,301
First half...	253,744	45,122	36,149
1923—Year	439,175	82,070	70,731
Second half.	192,021	38,351	32,849
First half...	247,154	43,719	37,882
1922—Year	436,295	66,071	55,709
Second half.	227,703	33,440	28,877
First half...	208,592	32,631	26,832

The census report for the first half of 1927 was encouraging in the matter of sales, which showed satisfactory gains over the preceding year in most instances. Sales of a number of representative products, with comparison for the first half of 1926, were as follows:—

	First six months— 1927.	1926.
	Pounds.	Pounds.
Paste paints.....	188,743,600	180,620,000
White lead in oil.....	142,410,900	133,900,500
Combination whites....	9,541,800	7,828,000
Zinc oxide in oil.....	2,643,200	2,032,700
Colors in japan.....	1,430,600	2,278,100
Colors in oil.....	9,330,200	8,694,400
Other paste paints.....	23,386,900	25,886,300
Paste fillers.....	6,552,800	5,616,900
	Gallons.	Gallons.
Undercoatings	3,462,900	2,299,800
Wall paints.....	6,868,700	6,166,300
Enamels	6,698,500	6,465,900
Other mixed paints....	23,463,500	21,946,900
Oleoresinous varnishes and stains.....	15,578,800	15,606,500
Spirit varnishes.....	2,352,200	1,587,900
Other varnishes.....	3,446,000	4,265,700
Nitrocellulose clear lacquer	2,737,100	2,075,000
Lacquer enamel.....	5,290,400	3,176,000
Thinners for nitrocellulose lacquers.....	4,732,100	3,054,900
Other lacquers.....	1,286,200	536,400

Details covering sales and production of these products during the closing half of 1927 will not be available for several months, but unofficial reports from the trade indicate that the industry made a good showing for the last six months of the year. Weather conditions, in the main, were unusually favorable for outdoor painting activity, and industrial business was reported holding up well. Some drop in lacquer consumption by the automobile industry was believed to have occurred during the last half of 1927, due to slackened production.

Metallic Lead and Zinc

Pig lead failed to show any appreciable recovery during 1927, and while the market rallied at times, there was no consistent upward movement until the closing months of the year, and the market closed 1927 at price levels materially under those in effect at the start of the year. Prices were uniformly under 1926 levels. A comparison of lead prices prevailing in the local market at the start of the various quarters of 1927 and the preceding year, together with comparative prices at the close of the respective years, follows:—

	Per pound— 1927.	1926.
January 1.....	$0.0780	$0.0955
April 1.....	.0735	.0830
July 1.....	.0830	.0830
October 1.....	.0625	.0870
December 31.....	.0650	.0780

Slab zinc was likewise in easy position during the greater part of the year, with prices lower than for the corresponding periods in 1926. Production of zinc was curtailed to some extent, domestic mining companies being unable to show a profit in many instances at going prices for the metal. Notwithstanding this curtailment, however, the market failed to show any substantial recovery. A comparison of slab zinc prices prevailing in the local market at the start of the various quarters of 1927 and the preceding year, together with comparative prices at the close of the respective years, follows:—

	Per pound— 1927.	1926.
January 1.....	$0.0740	$0.0905
April 1.....	.0690	.07521/2
July 1.....	.0650	.0755
October 1.....	.0650	.0775
December 31.....	.05971/2	.0735

Pigments

Declines in prices for lead and zinc were naturally reflected in the market for pigments, notably lead pigments and oxides. Corroders were forced to make a number of downward price revisions in their products, and the market closed the year at levels appreciable under those in effect at the end of 1926.

Although corroders have not as yet reported on their 1927 sales totals, it is generally believed in paint trade circles that these will show some falling off as compared with 1926 tonnage. The market was slow to get going during the early part of the year, and spring volume failed to come up to the expectations of the makers. The unsettled position of the metal market was likewise an important factor in holding down buying, notwithstanding the guarantee against price decline offered by the corroders on a number of their more important products. While it is not believed that distributors have carried large stocks of lead pigments and oxides into the new year, it is evident that competition for spring business will be keen, with buyers adhering rather closely to a hand-to-mouth buying policy. In an effort to break down sales resistance, corroders have guaranteed their prices against decline up to June 30, 1928, on a number of products, an unusually long guarantee period.

Conditions in the zinc oxide market were fairly stable throughout the year. Manufacturers appeared to have their business well in hand, and there was an absence of the sharp competition which had made itself apparent in the previous year, and which forced a number of price cuts at that time. Manufacturers of zinc oxides had readjusted their prices downward in line with lower metal costs at the start of the year, and made no general revisions during 1927. In fact, price cuts to meet competition during the latter part of 1926 had carried the market under a parity with the metal market, so that manufacturers had already anticipated the further declines in slab zinc which developed during 1927.

Lithopone business appeared to more than hold its own during 1928 in the matter of tonnage. Prices were well maintained throughout the year, and the market had calmed down following the sharp competition during the closing half of 1926, which carried prices to lower levels. Manufacturers carried a heavy volume of contract business on their books throughout the year, and were thus able to scale production to meet the consumptive needs of the industry.

Business in barytes, both the imported and the domestic material, was along well-defined lines throughout the year. Consuming manufacturers in most instances had placed contracts covering their year's requirements, and withdrawals against these contracts furnished most of the year's activity. Quotations were well maintained throughout.

The market for blanc fixe fluctuated within narrow channels during the year, in response to changes in production costs. The market closed 1927 at a level fractionally under that in effect at the end of the preceding year.

Increased production brought about a reduction in prices for titanium pigment in 1927. The producer of this pigment during the year concluded negotiations for the taking over of a large titanium pigment enterprise in Norway, and likewise completed arrangements for the manufacture of this material in Germany.

Dry Colors

The price trend was toward lower levels during 1927, although no pronounced declines developed. Price changes in most instances were traceable directly to variations in raw materials costs, although in a few instances, notably on chrome yellow and iron blues, prices appeared to move more in response to competitive conditions within the industry.

Volume, on the whole, was heavy and was believed to have exceeded 1926 totals, although definite data as to the aggregate tonnage for the year is lacking as yet. Sellers, in the majority of cases, seemed to have their business more in hand than was the case for the several preceding years, and while excessive competition had by no means disappered from the market, it was less conspicuous than in former years.

Vermilion red was the outstanding color for the year, insofar as price appreciation was concerned. The advance in this color was brought about entirely by the higher market for quicksilver which prevailed during 1927. The range on vermilion for the year was $1.55 to $1.95 per pound, as contrasted with a range of $1.40 to $1.60 during 1926.

Standard carbon black was coming in for considerable attention during the year, on reports of a strengthening in the statistical position in Louisiana. This was traceable primarily to the extensive pipeline development in the Monroe field, pipeline operators entering the market as natural gas buyers in competition with carbon black manufacturers and offering prices materially in excess of those which the carbon makers can afford to pay on the current price basis for blacks. Fortunately, however, the carbon manufacturers in most instances were protected by long-term contracts, which tended to hold down their production costs. These contracts begin to expire at the end of 1928, and the outlook for next year, therefore, is very uncertain. A number of makers are transferring their operations away from the Monroe field; some to the Rocky Mountain fields, while others are endeavoring to develop the industry in Texas. Carbon black prices in 1927 were under those for the preceding year, due to a considerable extent to the fact that makers were still engaged in cutting down the large surplus stocks which had accumulated in the previous two or three years.

Black oxide of iron was coming in for broader consumption in the paint trade during 1927, and the market averaged slightly higher than was the case in the previous year.

Other blacks showed little variation from 1926 price levels during the year just ended.

Iron blues were in unsettled position during the greater part of the year. For the most part, rumors of business passing under quoted levels persisted, and it appeared that this talk was well founded in many instances. Manufacturers declared that their selling prices for iron blues were practically down to a cost basis, but competition was so keen that efforts to work the market to a more profitable level were fruitless. Prices averaged slightly under 1926 levels.

Stabilized conditions prevailed throughout the entire year. The great bulk of 1927 business in browns was centered on deliveries against contracts placed at the start of the year, and there was little or no variation in the spot basis. Consumption was reported to be holding up well.

Chrome greens were in much better position last year than was the case in 1926. In former years this color ranked along with chrome yellow and iron blues as a competitive seller and was coming in for some amount of price shading quite regularly. Last year, however, chrome greens seemed to have escaped from this category and reasonably stable conditions prevailed throughout the year under the influence of fairly active demand.

Other greens showed a minimum of fluctuation for the year. Commercial green developed some easiness and sold at levels under those for 1926, but the remainder of the market held about steady.

As outlined in the general dry color market summary, vermilion prices showed material appreciation during 1927, following the sharp increases in production costs. Development of intense competition on para and toluidin toners during the summer months resulted in some weakening of the market position, and some of the sellers who had previously been high were forced to revise their prices downward in line with general going prices. This situation appeared to have adjusted itself at the year-end, and the market was in fairly stable position. Other reds met with a sustained demand throughout the year and held fairly steady.

French ocher prices were a little lower during 1927, as compared with the preceding year, but the decline was not drastic and was prompted by an easing off in the cost basis in primary markets. The market for domestic ochers moved in sympathy with that for the imported product. Chrome yellow was under selling pressure during the greater part of the year and sold at levels under those prevailing in the previous year, ranging 16c. to 17c. per pound, as contrasted with a range of 17c. to 18c. per pound in 1926.

Colors in Oil

Business conditions were favorable in the market during the greater part of the year. Weather conditions, on the whole, were propitious, and considerable outdoor painting activity resulted. Total sales of colors in oil for the first half of the year amounted to 9,330,200 pounds, as compared with 8,694,400 pounds in the corresponding period in 1926, and 9,122,700 pounds during the closing half of 1926. While definite figures on sales for the closing half of 1927 are not yet available, it has been estimated in trade circles that the total will be well over that for the second half of 1926. Pricewise, the market for oil colors showed stability throughout the greater part of the past year, and manufacturers in most instances have carried their 1927 price schedules over into the current year.

Industrial business was exceptionally heavy during the first half of 1927, sales showing a marked gain over those for the corresponding period in the previous year.

Varnish Gums

Substantial reductions in varnish gums prices developed during the past year, the market on the more important grades closing 1927 at levels materially under those in effect at the start of the year. During the greater part of 1927 it was a buyers' market on practically all grades, but as the year drew near its close it was evident that the pendulum was about to swing in the other direction, and consequently there was some improvement in trading.

In an effort to legislate unfavorable market conditions in the kauri gum industry out of existence, the New Zealand government, through the New Zealand Kauri Gum Control Commission, took over the purchasing and marketing of kauri gum last year, but the experiment was a dismal failure. The control board never did get really started, and the great bulk of the business remained in the hands of the regular trade. At the year end it appeared that the control board was due for early extinction. No real constructive developments occurred in kauri gum during the year traceable to the activities of the control board. On the contrary, interference by the board tended to further demoralize market conditions. Cheaper qualities of kauri were coming in for a better call in this country last year, and it appeared that larger quantities of kauri gum found their way into American-made varnishes and lacquers in 1927 than was the case in the previous year.

In line with steadily declining rosin prices, ester gum quotations were easy during the greater part of 1927. The market for light gum closed the year at 9½ cents per pound, against a prevailing price of 13¾ cents a pound at the start of 1927. Rosin prices were sharply lower during the year, prices prevailing during January being practically halved in a few instances by the time the market had reached bottom. There was a better consumption of esters reported during the year.

Dammar gum averaged slightly lower at the year-end than was the case in January, 1927, and demand was picking up as the market reached a trading level. The same was true of copal grades, prices for Pontianaks and Manilas showing sharp recessions over the year.

While buying of the general line of varnish gums was almost exclusively prompt and near-by delivery over 1927, it was evident at the close of the year that consuming manufacturers were showing a little more confidence in underlying conditions. While varnish and lacquer makers did not go back to their old methods of covering their gum needs three to six months in advance, there was more of a tendency shown to operate thirty to sixty days ahead, particularly on some of the gums which had been in short supply during the closing quarter.

Driers

Consuming manufacturers during the past year displayed a marked tendency to get away from the old basis of contract coverage on their requirements, and were transferring their operations more and more to the spot market. As a result of this tendency, makers were forced to intensify their sales activities considerable. Business, on the whole, was fair

throughout the greater part of the year. Advances in raw materials costs forced increases in prices for driers in many instances, and the market closed the year at levels somewhat over those prevailing at the start of 1927 in a number of instances.

Lacquer Materials

Expansion in the demand for lacquer materials made rapid progress during 1927. There were consistent gains in demand for the finished products from automobile manufacturers as well as from master painters and decorators who were coming to recognize the necessity of increasing their use of these newer finishes. This resulted in a marked expansion of production facilities on the part of the manufacturers of solvents and diluents. Notwithstanding this, the trade was handicapped to some extent through the fact that production schedules were not always keeping pace with the accelerated rate of consumption.

Denatured alcohol prices tended uniformly upward throughout the year on the probability of a marked curtailment in the production in 1928. This was finally agreed upon later in the year when the new industrial alcohol advisory council in agreement with the prohibition officials decided to limit the 1928 production to 85,000,000 gallons, which was a reduction of 15,000,000 gallons, compared with the year before. This agreement, it was believed, would tend to stabilize the industry during 1928, as the plan did not involve any increase in prices or restriction on the amount of alcohol that could be used.

There were a succession of advances in butyl alcohol during the first quarter of the year resulting in a net gain of ¾c., and putting the price up to 19c. per pound, tank, works, and 19½c. per pound, drums, car lots, with less than car lots quoted at 20c., and cans at 24½c. There had been a slight reaction in prices in February followed by a gain of ½c. late in March. The price trend of amyl alcohol was a reactionary one, and a concession of 25c. per gallon in March, to $2.25 to $2.50 per gallon, was followed by further price shading later on in the year until the market had reacted to $1.90 to $2.10 per gallon in drums. There was an upward trend in dibutyl phthalate in the early days of the year with contract shipments quoted at 30½c. per pound, drums, and spot shipments at 32c. to. 33c. during the first quarter. Subsequently the tone became reactionary and the material was available at about 1c. per pound less. The wide adaptability of the solutions of nitrocellulose made for a marked increase in the sales volume early in the year. At this time cellulose acetate developed a reactionary trend with offers down to $1.35 to $1.50 per pound in bags; later the inside price was lowered to $1.25.

The market entered the second quarter of the year with some unsettlement discernible in a number of the solvents. There was rather keen competition in evidence in butyl acetate, as well as butyl propionate, and prices for both were subjected to shading. Volume sales were the rule, however, in tricresyl phosphate. At this time stocks of plasticizers and softeners were none too plentiful, and the tone of most of them was quite steady. Although consumption of butyl alcohol was well maintained during the second quarter of the year, the price continued to fluctuate in keeping with the tendency of the raw material. Late in the spring producers of ethyl acetate, claiming they had been selling the product at too narrow a margin of profit, announced an advance of 13c. per gallon, establishing the market at 85c. per gallon in tanks, 87c. in drums, car lots, and 89c. for less than carlots. The anhydrous was quoted at $1.05 per gallon in tanks, $1.07 in drums, car lots, and $1.10 for less than car lots. These prices were well maintained until late in the year when under keen competition from manufacturers in Philadelphia and elsewhere these values were all being shaded to the extent of 5c. per gallon.

In June the quotation for normal butyl alcohol was advanced 1c. per gallon due to higher costs of raw material, and the price was established at 19¼c. to 20½c. per pound, depending on quantities.

A rather weak and unsettled tone appeared in celluloid scraps during the fall months. Stocks were in liberal supply, consumption had diminished, and prices were open to shading. Toward the end of October methyl acetate was advanced 15c., establishing it at $1.10 to $1.15 per gallon. Technical acetin dropped 6c. per pound at this time to 32c. to 34c. per pound in drums. This cut brought in a much better volume of general inquiry. The list of plasticizers and softerners available to the trade was being added to daily.

Demand from the motion picture and silk interests for acetone was a feature of the market during the fall months. The usual amount of competition from foreign materials was making itself felt, although domestic producers felt they were securing quite a satisfactory share of the gross volume of business which presented itself. The market closed the year with highly competitive conditions evident in various quarters. The large consumption which had been expected from the automotive industries had not shown itself, as production schedules on new cars had not yet become operative. The automobile interests were, therefore, putting a certain amount of pressure on the solvents producers for lower prices. This resulted in scheduled prices not being adhered to in the closing days of the year. The principal price pressure came against ethyl acetate and butyl acetate. In the case of the latter, imported material was competing much more actively with the domestic product. A return to normal activity was confidently predicted for an early date in the new year.

Other Paint Materials

Importers were able to maintain the market for imported fine-ground casein during 1927 at prices materially over those in effect during the preceding year. This was traceable to curtailed production in the Argentine, as well as higher prices in primary markets, due to heavier European buying, and a broader demand from other markets.

Higher production costs, due to advances in raw materials, together with some cutting down of manufacturers' stocks, accounted for a general upward movement in selling prices for glues during 1927. Low-grade cabinet glue ranged 16c. to 19c. per pound for hte year, against 14c. to 16c. in 1926, with common bone ranging 13c. to 16c., as contrasted with 12c. to 13c.

Imported gold leaf was a little stronger last year than during 1926, due to the higher import duties and the resulting drop in imports.

Varnish makers' and painters' naphtha averaged lower during 1927 than was the case in the preceding year, due to the lower market for practically all refined petroleum products last year, as a result of the heavy overproduction of both crude and refined petroleum.

Window Glass

Plate and window glass manufacturers again suffered from foreign competition last year, and were forced to reduce their prices further in order to compete with the imported glass. The competition of the foreign glass was particularly keen along the Atlantic seaboard and other Eastern markets.

Window glass manufacturers have petitioned the Tariff Commission to recommend to the President a 50 per cent increase in the import duty, in an effort to obtain relief from the competition of foreign glass. Statistics for the complete calendar year 1927 are not yet available, but window glass imports for the first ten months of 1927 amounted to 72,908,273 pounds, valued at $2,460,315, as contrasted with imports amounting to 66,582,849 pounds, valued at $2,660,928, in the corresponding period in 1926. Taking an average of the ten-month period as a basis, 1927 imports reached an estimated total of 87,489,873 pounds for all of 1927, a sharp increase over the imports of 81,633,934 pounds in 1926, which, up to that time, was a record year.

Although plate glass imports in 1927 were under those of the previous year, consumption also apparently fell off materially, with the domestic producers forced to assume much of the loss in business through curtailing their output. Total imports of plate glass for the first ten months of 1927 were 14,386,550 square feet, valued at $4,019,752, as compared with 22,579,408 square feet, valued at $7,463,756, in the first ten months of 1926. Taking the average for the first ten months of 1927, imports for the calendar year are estimated at 16,000,000 square feet, as compared with 26,664,263 square feet imported in 1926.

Paint and Varnish Materials: Record of Prices

Metals

Pig Lead

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0955	$0.0927½	$0.0780	$0.0740
February	.0937½	.0915	.0740	.0702½
March	.0900	.0820	.0765	.0740
April	.0830	.0785	.0745	.0660
May	.0785	.0775	.0700	.0640
June	.0840	.0775	.0640	.0640
July	.0870	.0825	.0660	.0620
August	.0915	.0865	.0675	.0650
September	.0890	.0875	.0675	.0625
October	.0875	.0825	.0625	.0625
November	.0825	.0800	.0625	.0600
December	.0800	.0780	.0650	.0630
Year	.0955	.0775	.0780	.0600

Zinc

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0910	$0.0835	$0.0735	$0.0672½
February	.0855	.0790	.0715	.0685
March	.0785	.0750	.0720	.0700
April	.0752½	.0705	.0692½	.0660
May	.0722½	.0710	.0650	.0635
June	.0760	.0727½	.0662½	.0642½
July	.0787½	.0750	.0670	.0650
August	.0785	.0765	.0670	.0657½
September	.0782½	.0770	.0660	.0652½
October	.0775	.0765	.0650	.0620
November	.0762½	.0750	.0620	.0595
December	.0752½	.0735	.0622½	.0597½
Year	.0910	.0705	.0735	.0595

Pigments

Barytes

October 18, 1871, the price was 1⅞c. to 2¼c. per pound; 1881, $21 to $25 per ton; 1891, $18 to $20; 1901, $17 to $20; 1911, $18.50 to $20.50; 1918, $19 to $20; 1920, August, $40.

Per ton

	1926. H.	1926. L.	1927. H.	1927. L.
January	$23.00	$23.00	$23.00	$23.00
February	23.00	23.00	23.00	23.00
March	23.00	23.00	23.00	23.00
April	23.00	23.00	23.00	23.00
May	23.00	23.00	23.00	23.00
June	23.00	23.00	23.00	23.00
July	23.00	23.00	23.00	23.00
August	23.00	23.00	23.00	23.00
September	23.00	23.00	23.00	23.00
October	23.00	23.00	23.00	23.00
November	23.00	23.00	23.00	23.00
December	23.00	23.00	23.00	23.00
Year	23.00	23.00	23.00	23.00

Blanc Fixe, Dry

July 21, 1880, the price was 3½c.; October 18, 1881, 3½c.; 1891, 2¾c. to 3c.; 1901, 2½c. to 2¾c.; 1911, 2¾c. to 4c.; 1913, 2¾c. to 4c.; 1920, August, 6¼c.

(Barrels, carlots, f.o.b. works)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.03¾	$0.03¾	$0.04¼	$0.04
February	.03¾	.03¾	.04	.04
March	.03¾	.03¾	.04	.04
April	.04	.03¾	.04	.04
May	.04¼	.04	.04	.04
June	.04¼	.04¼	.04¼	.04
July	.04¼	.04¼	.04¼	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04¼	.04
November	.04¼	.04¼	.04	.04
December	.04¼	.04¼	.04	.04
Year	.04¼	.03¾	.04¼	.04

White Lead, Basic Carbonate

October 18, 1871, the price was 10c. to 10¼c.; 1881, 6¾c. to 7c.; 1891, 6¾c. to 7½c.; 1901, 4¾c. to 5c.; 1911, 5½c. to 6c.; 1913, 5¾c.; 1917, July, 11½c.

(Dry, in casks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.10¾	$0.10¾	$0.09¾	$0.09¾
February	.10¾	.10¾	.09¾	.09¾
March	.10¾	.10¾	.09¾	.09¾
April	.10¾	.10¾	.09¾	.09¾
May	.10¾	.10¾	.09¾	.09¾
June	.10¾	.10¾	.09¾	.09
July	.10¾	.10¾	.09	.09
August	.10¾	.10¾	.09	.09
September	.10¾	.10¾	.09	.09
October	.10¾	.10¾	.09	.09
November	.10¾	.10¼	.09	.08½
December	.10¼	.09¾	.08½	.08½
Year	.10¾	.09¾	.09¾	.08½

White Lead, Basic Carbonate, in Oil

October 18, 1871, the price was 11½c.; 1881, 7¼c. to 7½c.; 1891, 6¾c. to 7½c.; 1901, 5¾c. to 6½c.; 1911, 7¼c. to 7½c.; 1913, 7¼c.; 1917, July, 11½c.

(Carload lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1236	$0.1236	$0.1215	$0.1215
February	.1236	.1236	.1215	.1215
March	.1236	.1236	.1215	.1174
April	.1233	.1236	.1174	.1174
May	.1236	.1236	.1174	.1174
June	.1236	.1236	.1174	.1113
July	.1236	.1236	.1113	.1113
August	.1236	.1236	.1113	.1113
September	.1236	.1236	.1113	.1113
October	.1236	.1236	.1113	.1113
November	.1236	.1236	.1113	.1073
December	.1236	.1236	.1073	.1073
Year	.1236	.1215	.1215	.1073

White Lead, Basic Sulphate

December 7, 1909, the price was 5¾c. to 6c.; October 19, 1911, 5¾c. to 5½c.; 1913, 5½c.; 1917, August, 11c.

(Dry, in casks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1000	$0.1000	$0.0900	$0.0900
February	.1000	.1000	.0900	.0900
March	.1000	.1000	.0900	.0900
April	.1000	.1000	.0900	.0900
May	.1000	.1000	.0900	.0900
June	.1000	.1000	.0900	.0825
July	.1000	.1000	.0825	.0825
August	.1000	.1000	.0825	.0825
September	.1000	.1000	.0825	.0825
October	.1000	.1000	.0825	.0825
November	.0950	.0950	.0825	.0775
December	.0950	.0900	.0775	.0775
Year	.1000	.0900	.0900	.0775

Buyers Prefer

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Market Information

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Accurate

Red Lead

October 18, 1871, the price was 8¾c. to 10c.; 1881, 6½c. to 6¾c.; 1891, 6¾c. to 7½c.; 1901, 5½c. to 6c.; 1911, 6½c. to 7c.; 1913, 7c. to 7½c.; 1917, July, 13c.

(Dry, in casks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1225	$0.1225	$0.1125	$0.1075
February	.1225	.1225	.1075	.1075
March	.1225	.1225	.1075	.1075
April	.1225	.1110	.1050	.1025
May	.1225	.1225	.1025	.1000
June	.1150	.1100	.1000	.1000
July	.1175	.1150	.1000	.1000
August	.1200	.1200	.1025	.1000
September	.1200	.1200	.1000	.0975
October	.1200	.1175	.0975	.0975
November	.1150	.1125	.0975	.0975
December	.1125	.1125	.1000	.1000
Year	.1225	.1100	.1125	.0975

Litharge, American

October 18, 1871, the price was 9c. to 9½c.; 1881, 6½c. to 6¾c.; 1891, 6¾c. to 7½c.; 1901, 4¾c. to 5¼c.; 1911, 5½c. to 6c.; 1913, 6¾c. to 7c.; 1917, July, 12½c.

Per pound

(Commercial Powdered, Casks)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1175	$0.1175	$0.1075	$0.1025
February	.1175	.1175	.1025	.1025
March	.1175	.1175	.1025	.1025
April	.1175	.1060	.1025	.0975
May	.1060	.1050	.0975	.0900
June	.1100	.1050	.0900	.0900
July	.1125	.1100	.0900	.0900
August	.1150	.1150	.0925	.0900
September	.1150	.1150	.0900	.0875
October	.1150	.1125	.0875	.0875
November	.1100	.1075	.0875	.0875
December	.1075	.1075	.0900	.0900
Year	.1175	.1050	.1075	.0875

Lithopone, American

May 13, 1901, the price was 5c. to 5½c.; October 18, 1901, 5c. to 5¼c.; 1911, 3¾c. to 4c.; 1913, 3¾c. to 4¼c.; 1920, July, 8¼c.

(Bags, car lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05¾	$0.05¾	$0.05¾	$0.05¾
February	.05¾	.05¾	.05¾	.05¾
March	.05¾	.05¾	.05¾	.05¾
April	.05¾	.05¾	.05¾	.05¾
May	.05¾	.05¾	.05¾	.05¾
June	.05¾	.05¾	.05¾	.05¾
July	.05¾	.05¾	.05¾	.05¾
August	.05¾	.05¾	.05¾	.05¾
September	.05¾	.05¾	.05¾	.05¾
October	.05¾	.05¾	.05¾	.05¾
November	.05¾	.05¾	.05¾	.05¾
December	.05¾	.05¾	.05¾	.05¾
Year	.05¾	.05¾	.05¾	.05¾

Orange Mineral, American

October 18, 1871, the price was 11½c. to 12c.; 1881, 8c. to 12¼c.; 1891, 8½c. to 8¾c.; 1901, 8c. to 8¼c.; 1911, 8½c. to 10c.; 1913, 8½c. to 10c.; 1917, July, 15c.

(Casks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1450	$0.1450	$0.1350	$0.1300
February	.1450	.1450	.1300	.1300
March	.1450	.1450	.1300	.1300
April	.1450	.1350	.1300	.1250
May	.1350	.1325	.1250	.1200
June	.1375	.1325	.1200	.1200
July	.1400	.1375	.1200	.1200
August	.1425	.1425	.1225	.1200
September	.1425	.1425	.1200	.1175
October	.1425	.1400	.1175	.1175
November	.1375	.1350	.1175	.1175
December	.1350	.1350	.1200	.1200
Year	.1450	.1325	.1350	.1175

Zinc Oxide, French Process, Red Seal

October 18, 1871, the price was 7¾c.; 1881, 4½c. to 5c.; 1891, 8c.; 1901, 8¼c. to 8¾c.; 1911, 8¾c. to 8½c.; 1913, 7c. to 7¼c.; 1917, April, 17½c.

(Bags, car lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1012½	$0.1012½	$0.09¾	$0.09¾
February	.1012½	.1012½	.09¾	.09¾
March	.1012½	.1012½	.09¾	.09¾
April	.1012½	.1012½	.09¾	.09¾
May	.1012½	.1012½	.09¾	.09¾
June	.1012½	.1012½	.09¾	.09¾
July	.1012½	.1012½	.09¾	.09¾
August	.1012½	.1012½	.09¾	.09¾
September	.1012½	.1012½	.09¾	.09¾
October	.1012½	.1012½	.09¾	.09¾
November	.1012½	.0950	.09¾	.09¾
December	.0937½	.0937½	.09¾	.09¾
Year	.1012½	.0937½	.09¾	.09¾

Zinc Oxide, French Process, White Seal

(Barrels, car lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1237½	$0.1237½	$0.1162½	$0.1162½
February	.1237½	.1237½	.1162½	.1162½
March	.1237½	.1237½	.1162½	.1162½
April	.1237½	.1237½	.1162½	.1162½
May	.1237½	.1237½	.1162½	.1162½
June	.1237½	.1237½	.1162½	.1162½
July	.1237½	.1237½	.1162½	.1162½
August	.1237½	.1237½	.1162½	.1162½
September	.1237½	.1237½	.1162½	.1162½
October	.1237½	.1237½	.1162½	.1162½
November	.1237½	.1175	.1162½	.1162½
December	.1162½	.1162½	.1162½	.1162½
Year	.1237½	.1162½	.1162½	.1162½

Zinc Oxide, French Process, Green Seal

(Bags, car lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1112½	$0.1112½	$0.1037½	$0.1037½
February	.1112½	.1112½	.1037½	.1037½
March	.1112½	.1112½	.1037½	.1037½
April	.1112½	.1112½	.1037½	.1037½
May	.1112½	.1112½	.1037½	.1037½
June	.1112½	.1112½	.1037½	.1037½
July	.1112½	.1112½	.1037½	.1037½
August	.1112½	.1112½	.1037½	.1037½
September	.1112½	.1112½	.1037½	.1037½
October	.1112½	.1112½	.1037½	.1037½
November	.1112½	.1050	.1037½	.1037½
December	.1037½	.1037½	.1037½	.1037½
Year	.1112½	.1037½	.1037½	.1037½

Zinc Oxide, American Process, Lead-free

(Bags, car lots)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0725	$0.0725	$0.0650	$0.0650
February	.0725	.0725	.0650	.0650
March	.0725	.0725	.0650	.0650
April	.0725	.0725	.0650	.0650
May	.0725	.0725	.0650	.0650
June	.0725	.0725	.0650	.0650
July	.0725	.0725	.0650	.0650
August	.0725	.0725	.0650	.0650
September	.0725	.0725	.0650	.0650
October	.0725	.0725	.0650	.0650
November	.0725	.0675	.0650	.0650
December	.0662½	.0650	.0650	.0650
Year	.0725	.0650	.0650	.0650

Zinc Oxide, American Process, 10-25 p.c. Leaded

(Barrels, car lots)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.08	$0.0675	$0.0675
February	.08	.08	.0675	.0675
March	.08	.08	.0675	.0675
April	.08	.08	.0687½	.0675
May	.07 12½	.07 12½	.0687½	.0687½
June	.07 12½	.07 12½	.0687½	.0687½
July	.07 12½	.07 12½	.0687½	.0687½
August	.07 12½	.07 12½	.0687½	.0687½
September	.07 12½	.07 12½	.0687½	.0687½
October	.07 12½	.07 12½	.0687½	.0687½
November	.07 12½	.0662½	.0687½	.0687½
December	.0650	.0650	.0687½	.0687½
Year	.0800	.0650	.0687½	.0687½

Dry Colors

Carbon Gas Black

August 22, 1892, the price was 4c. to 4½c.; October 18, 1901, 8c. to 20c.; 1911, 6¾c. to 8c.; 1913, 4c. to 8c.; 1918, May, 40c.

(F.o.b. works, bags)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.08	$0.08	$0.08
February	.08	.08	.08	.08
March	.08	.08	.08	.06¼
April	.08	.08	.06½	.06¼
May	.08	.08	.06½	.06½
June	.08	.08	.06½	.06½
July	.08	.08	.06½	.06½
August	.08	.08	.06½	.06½
September	.06	.08	.06½	.06½
October	.08	.08	.06½	.06½
November	.08	.08	.06½	.06½
December	.08	.08	.06½	.06½
Year	.08	.08	.06½	.06½

Lampblack

October 18, 1871, the price was 6½c. to 10c.; 1881, 5c. to 8c.; 1891, 5c. to 10c.; 1901, 4½c. to 6c.; 1911, 3c. to 15c.; 1913, 3c. to 7c.; 1920, December, 48c.

(Commercial, barrels)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.09	$0.09	$0.09
February	.09	.09	.09	.09
March	.09	.09	.09	.09
April	.09	.09	.09	.09
May	.09	.09	.09	.09
June	.09	.09	.09	.09
July	.09	.09	.09	.09
August	.09	.09	.09	.09
September	.09	.09	.09	.09
October	.09	.09	.09	.09
November	.09	.09	.09	.09
December	.09	.09	.09	.09
Year	.09	.09	.09	.09

Ivory Black

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
Janaury	$0.12	$0.12	$0.12	$0.12
February	.12	.12	.12	.12
March	.12	.12	.12	.12
April	.12	.12	.12	.12
May	.12	.12	.12	.12
June	.12	.12	.12	.12
July	.12	.12	.12	.12
August	.12	.12	.12	.12
September	.12	.12	.12	.12
October	.12	.12	.12	.12
November	.12	.12	.12	.12
December	.12	.12	.12	.12
Year	.12	.12	.12	.12

Iron Oxide, Black

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.04½	$0.04½
February	.04	.04	.04½	.04½
March	.04	.04	.04½	.04½
April	.04	.04	.04½	.04½
May	.04	.04	.04½	.04½
June	.04	.04	.04½	.04½
July	.04	.04	.04½	.04½
August	.04	.04	.04½	.04½
September	.04	.04	.04½	.04½
October	.04½	.04	.04½	.04½
November	.04½	.04½	.04½	.04½
December	.04½	.04½	.04½	.04½
Year	.04½	.04	.04½	.04½

Iron Blues

Bronze, Milori, Chinese and Prussian

October 18, 1871, the price was (Prussian blue), 35c. to 70c.; 1881, 30c. to 60c.; 1891, 25c. to 40c.; 1901, 28c. to 34c.; 1911, 28c. to 30c.; 1913, 30c. to 32c.; 1917, July, $1.50.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.33	$0.33	$0.33	$0.33
February	.33	.33	.33	.33
March	.33	.32	.33	.33
April	.32	.32	.33	.33
May	.32	.32	.33	.33
June	.32	.32	.33	.33
July	.32	.32	.33	.31
August	.32	.32	.31	.31
September	.32	.32	.31	.31
October	.32	.32	.31	.31
November	.33	.32	.31	.31
December	.33	.33	.31	.31
Year	.33	.32	.33	.31

Browns

Sienna, Italian, Burnt

October 18, 1871, the price was 12c. to 14c.; 1881, 5½c.; 1891, 4c. to 5c.; 1901, 3½c. to 7½c.; 1911, 3c. to 9c.; 1913, 4c. to 7c.; 1920, January, 16c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.04	$0.04
February	.04	.04	.04	.04
March	.04	.04	.04	.04
April	.04	.04	.04	.04
May	.04	.04	.04	.04
June	.04	.04	.04	.04
July	.04	.04	.04	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04	.04
November	.04	.04	.04	.04
December	.04	.04	.04	.04
Year	.04	.04	.04	.04

Sienna, American, Burnt and Powdered

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03	$0.03	$0.03	$0.03
February	.03	.03	.03	.03
March	.03	.03	.03	.03
April	.03	.03	.03	.03
May	.03	.03	.03	.03
June	.03	.03	.03	.03
July	.03	.03	.03	.03
August	.03	.03	.03	.03
September	.03	.03	.03	.03
October	.03	.03	.03	.03
November	.03	.03	.03	.03
December	.03	.03	.03	.03
Year	.03	.03	.03	.03

Umber, Turkey, Burnt and Powdered

May 29, 1872, the price was 4½c. to 5c.; August 31, 1881, 3½c. to 4c.; October 18, 1891, 3½c. to 4c.; 1901, 2½c. to 3½c.; 1911, 2¾c. to 3½c.; 1913, 3c. to 3½c.; 1917, October, 7½c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.04	$0.04
February	.04	.04	.04	.04
March	.04	.04	.04	.04
April	.04	.04	.04	.04
May	.04	.04	.04	.04
June	.04	.04	.04	.04
July	.04	.04	.04	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04	.04
November	.04	.04	.04	.04
December	.04	.04	.04	.04
Year	.04	.04	.04	.04

Umber, American, Burnt and Powdered

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.03¼	$0.03¼	$0.03	$0.03
February	.03¼	.03¼	.03	.03
March	.03¼	.03¼	.03	.03
April	.03¼	.03¼	.03	.03
May	.03¼	.03¼	.03	.03
June	.03¼	.03¼	.03	.03
July	.03¼	.03¼	.03	.03
August	.03¼	.03¼	.03	.03
September	.03¼	.03¼	.03	.03
October	.03¼	.03¼	.03	.03
November	.03¼	.03¼	.03	.03
December	.03¼	.03	.03	.03
Year	.03¼	.03	.03	.03

Vandyke Brown, Imported

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.04	$0.04
February	.04	.04	.04	.04
March	.04¼	.04	.04	.04
April	.04¼	.04¼	.04	.04
May	.04¼	.04	.04	.04
June	.04	.04	.04	.04
July	.04	.04	.04	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04	.04
November	.04	.04	.04	.04
December	.04	.04	.04	.04
Year	.04¼	.04	.04	.04

Greens

Chrome Green, Light, C. P.

October 18, 1871, the price was 13c. to 21c.; 1881, 5c. to 14c.; 1891, 8c. to 26c.; 1901, 16c. to 20c.; 1911, 17c. to 25c.; 1913, 7c. to 25c.; 1918, August, 70c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.28	$0.28	$0.27	$0.27
February	.29	.28	.27	.27
March	.28	.28	.27	.27
April	.28	.28	.27	.27
May	.28	.28	.27	.27
June	.28	.28	.27	.27
July	.28	.28	.27	.27
August	.28	.28	.27	.27
September	.28	.27½	.27	.27
October	.27½	.27	.27	.27
November	.27	.27	.27	.27
December	.27	.27	.27	.27
Year	.29	.27	.27	.27

Commercial Green

October 24, 1877, the price was 10c. to 20c.; October 18, 1881, 5c. to 8c.; 1891, 8c.; 1901, 5c. to 6½c.; 1911, 3½c. to 5c.; 1913, 3½c. to 5c.; 1919, February, 15c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.09	$0.07	$0.07
February	.09	.09	.07	.07
March	.09	.07	.07	.07
April	.07	.07	.07	.07
May	.07	.07	.07	.07
June	.07	.07	.07	.07
July	.07	.07	.07	.06¼
August	.07	.07	.06¼	.06¼
September	.07	.07	.06¼	.06¼
October	.07	.07	.06¼	.06¼
November	.07	.07	.06¼	.06¼
December	.07	.07	.06¼	.06¼
Year	.09	.07	.07	.06¼

Reds

Carmine No. 40

August 15, 1877, the price was $5.50 to $7; October 18, 1881, 5c. to 8c.; 1891, 8c.; 1901, $3.20; 1901, $2.05 to $2.75; 1911, $2.30 to $2.50; 1913, $2.75 to $3; 1919, January, $6.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$5.10	$5.10	$5.00	$5.00
February	5.10	5.10	5.50	5.50
March	5.10	5.10	5.50	5.50
April	5.10	5.10	5.50	5.50
May	5.10	5.00	5.50	5.50
June	5.00	5.00	5.50	5.50
July	5.00	5.00	5.50	5.25
August	5.00	5.00	5.25	5.25
September	5.00	5.00	5.25	5.25
October	5.00	5.00	5.25	5.25
November	5.00	5.00	5.25	5.25
December	5.00	5.00	5.25	5.25
Year	5.10	5.00	5.50	5.00

Oxide Red, Copperas

May 18, 1907, the price was 2c. to 7½c.; October 18, 1911, 2¾c. to 10c.; 1913, 2¾c. to 10c.; 1918, July, 20c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.04	$0.04	$0.04	$0.04
February	.04	.04	.04	.04
March	.04	.04	.04	.04
April	.04	.04	.04	.04
May	.04	.04	.04	.04
June	.04	.04	.04	.04
July	.04	.04	.04	.04
August	.04	.04	.04	.04
September	.04	.04	.04	.04
October	.04	.04	.04	.04
November	.04	.04	.04	.04
December	.04	.04	.04	.04
Year	.04	.04	.04	.04

Indian Red, American, Pure

September 8, 1880, the price was 1½c. to 1¾c.; October 18, 1881, 1½c. to 1¾c.; 1891, 3¼c. to 6½c.; 1901, 3c. to 3¼c.; 1911, 1½c. to 1¾c.; 1913, 1½c. to 1¾c.; 1919, January, 16c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10	$0.10	$0.10	$0.10
February	.10	.10	.10	.10
March	.10	.10	.10	.10
April	.10	.10	.10	.10
May	.10	.10	.10	.10
June	.10	.10	.10	.10
July	.10	.10	.10	.10
August	.10	.10	.10	.10
September	.10	.10	.10	.10
October	.10	.10	.10	.10
November	.10	.10	.10	.10
December	.10	.10	.10	.10
Year	.10	.10	.10	.10

Tuscan Red

August 15, 1877, the price was 20c. to 25c.; October 18, 1881, 11½c. to 13c.; 1891, 7c. to 10c.; 1901, 7c. to 10c.; 1911, 7c. to 10c.; 1913, 7c. to 10c.; 1921, November, 44c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15	$0.15	$0.15	$0.15
February	.15	.15	.15	.15
March	.15	.15	.15	.15
April	.15	.15	.15	.15
May	.15	.15	.15	.15
June	.15	.15	.15	.15
July	.15	.15	.15	.15
August	.15	.15	.15	.15
September	.15	.15	.15	.15
October	.15	.15	.15	.15
November	.15	.15	.15	.15
December	.15	.15	.15	.15
Year	.15	.15	.15	.15

Venetian Red

October 18, 1871, the price was 2½c. to 3c.; 1881, 1¼c. to 1¾c.; 1891, 1¼c. to 1½c.; 1901, 1¾c. to 3c.; 1911, 1¼c. to 1¾c.; 1913, 1½c. to 1¾c.; 1920, November, 10c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.01½	$0.01½	$0.01¼	$0.01¼
February	.01½	.01½	.01¼	.01¼
March	.01½	.01½	.01¼	.01¼
April	.01½	.01½	.01¼	.01¼
May	.01½	.01½	.01¼	.01¼
June	.01¼	.01½	.01¼	.01¼
July	.01¼	.01½	.01¼	.01¼
August	.01¼	.01½	.01¼	.01¼
September	.01½	.01½	.01¼	.01¼
October	.01¼	.01½	.01¼	.01¼
November	.01½	.01½	.01¼	.01¼
December	.01½	.01½	.01¼	.01¼
Year	.01½	.01½	.01¼	.01¼

English Vermilion

October 18, 1881, the price was $1 to $1.10; 1881, 64c.; 1891, 91c. to 95c.; 1901, 80c. to 90c.; 1911, 70c.; 1913, 70c.; 1919, January, $2.10.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.45	$1.45	$1.55	$1.55
February	1.45	1.40	1.55	1.55
March	1.45	1.40	1.70	1.55
April	1.45	1.40	1.85	1.75
May	1.45	1.45	1.85	1.80
June	1.45	1.45	1.80	1.70
July	1.45	1.45	1.80	1.80
August	1.45	1.40	1.80	1.80
September	1.45	1.40	1.80	1.70
October	1.60	1.45	1.95	1.70
November	1.60	1.55	1.95	1.90
December	1.60	1.55	1.95	1.90
Year	1.60	1.40	1.95	1.55

Yellows

Chrome Yellow, C. P.

October 18, 1871, the price was 22c. to 23c.; 1881, 10c. to 30c.; 1891, 10c. to 25c.; 1901, 10¼c. to 25c.; 1911, 12½c. to 13c.; 1913, 11c. to 13c.; 1918, March, 35c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.18	$0.18	$0.17	$0.17
February	.18	.17½	.17	.17
March	.17½	.17½	.17	.17
April	.17½	.17½	.17	.16½
May	.17½	.17	.16½	.16½
June	.17	.17	.16½	.16½
July	.17	.17	.16½	.16½
August	.17	.17	.16½	.16½
September	.17	.17	.16½	.16¼
October	.17	.17	.16¼	.16
November	.17	.17	.16	.16
December	.17	.17	.16	.16
Year	.18	.17	.17	.16

Yellow Ocher, Domestic, Strong

October 18, 1871, the price was 1¼c. to 1½c.; 1881, 1¼c. to 1½c.; 1891, 1½c. to 2¼c.; 1901, 1½c. to 2c.; 1911, 1½c. to 2c.; 1913, ⅝c. to ⅘c.; 1919, August, 6½c. per pound.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.01¼	$0.01¼	$0.01⅝	$0.01⅝
February	.01¼	.01¼	.01⅝	.01⅝
March	.01¼	.01¼	.01⅝	.01⅝
April	.01¼	.01¼	.01⅝	.01⅝
May	.01¼	.01¼	.01⅝	.01⅝
June	.01¼	.01¼	.01⅝	.01⅝
July	.01¼	.01¼	.01⅝	.01⅝
August	.01¼	.01¼	.01⅝	.01⅝
September	.01¼	.01¼	.01⅝	.01⅝
October	.01¼	.01¼	.01⅝	.01⅝
November	.01¼	.01¼	.01⅝	.01⅝
December	.01⅝	.01⅝	.01⅝	.01⅝
Year	.01⅝	.01⅝	.01⅝	.01⅝

French Ocher, Dark

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
Juanray	$0.03	$0.03	$0.02⅞	$0.02⅞
February	.03	.03	.02⅞	.02⅞
March	.03	.03	.03	.03
April	.02	.02½	.03	.03
May	.02½	.02½	.02⅞	.02⅞
June	.02½	.02½	.02⅞	.02⅞
July	.02½	.02½	.02⅞	.02⅞
August	.02½	.02½	.02⅞	.02⅞
September	.02½	.02½	.02⅞	.02⅞
October	.02½	.02½	.02⅞	.02⅞
November	.02½	.02½	.02⅞	.02⅞
December	.02⅞	.02¼	.02⅞	.02⅞
Year	.03	.02¼	.02⅞	.02⅞

Other Paint Materials

Casein

(Imported, bags, car lots)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13½	$0.13½	$0.16¼	$0.15
February	.13½	.13½	.17	.16
March	.15	.13½	.17	.16½
April	.18	.17	.19	.18½
May	.18½	.17½	.18½	.18
June	.18	.18	.18	.18
July	.18	.18	.18	.17½
August	.18	.17	.18	.17½
September	.17	.16½	.18	.18
October	.16½	.16	.18	.18
November	.16	.15	.18	.18
December	.16	.15	.18½	.18
Year	.18½	.13½	.19	.15

China Clay, Imported

October 18, 1871, the price was 2¼c. to 2½c.; 1881, $14.50 to $21 per ton; 1891, $13 to $18; 1901, $12 to $17; 1911, $11 to $18; 1913, $11 to $18; 1918, August, $50.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$13.00	$13.00	$15.00	$15.00
February	15.00	13.00	15.00	15.00
March	15.00	15.00	15.00	15.00
April	15.00	15.00	15.00	15.00
May	15.00	15.00	15.00	15.00
June	15.00	15.00	15.00	15.00
July	15.00	15.00	15.00	15.00
August	15.00	15.00	15.00	15.00
September	15.00	15.00	15.00	15.00
October	15.00	15.00	15.00	15.00
November	15.00	15.00	15.00	15.00
December	15.00	15.00	15.00	15.00
Year	15.00	13.00	15.00	15.00

China Clay, Domestic

November 30, 1891, the price was $9 to $12; October 18, 1901, $8.50 to $10; 1911, $8 to $9; 1913, $8 to $9; 1919, March, $25.

(F.o.b. point of production)

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$15.00	$15.00	$10.00	$10.00
February	15.00	15.00	10.00	10.00
March	15.00	15.00	10.00	10.00
April	15.00	15.00	10.00	10.00
May	15.00	12.00	10.00	10.00
June	12.00	12.00	10.00	10.00
July	12.00	12.00	10.00	10.00
August	12.00	12.00	10.00	10.00
September	12.00	12.00	10.00	10.00
October	12.00	10.00	10.00	10.00
November	10.00	10.00	10.00	10.00
December	10.00	10.00	10.00	10.00
Year	15.00	10.00	10.00	10.00

Cobalt, Oxide, Black

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.10	$2.10	$2.10	$2.10
February	2.10	2.10	2.10	2.10
March	2.10	2.10	2.10	2.10
April	2.10	2.10	2.10	2.10
May	2.10	2.10	2.10	2.10
June	2.10	2.10	2.10	2.10
July	2.10	2.10	2.10	2.10
August	2.10	2.10	2.10	2.10
September	2.10	2.10	2.10	2.10
October	2.10	2.10	2.10	2.10
November	2.10	2.10	2.10	2.10
December	2.10	2.10	2.10	2.10
Year	2.10	2.10	2.10	2.10

Fuller's Earth, Powdered (Imported)

February 18, 1893, the price was 75c. to 80c. per 100 pounds; October 18, 1901, 75c. to 80c.; 1911, 80c. to 85c.; 1913, 80c. to 85c.; 1918, July, $2.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$23.00	$23.00	$25.00	$25.00
February	23.00	23.00	25.00	25.00
March	24.00	23.00	25.00	25.00
April	24.00	24.00	25.00	25.00
May	24.00	24.00	25.00	25.00
June	24.00	24.00	25.00	25.00
July	24.00	24.00	25.00	25.00
August	24.00	24.00	25.00	25.00
September	25.00	24.00	25.00	25.00
October	25.00	25.00	25.00	25.00
November	25.00	25.00	25.00	25.00
December	25.00	25.00	25.00	25.00
Year	25.00	23.00	25.00	25.00

Plaster of Paris (Barrels)

August 15, 1877, the price was $3; October 18, 1881, $1.75; 1891, $1.75 to $2; 1901, $1.75; 1911, $1.50 to $1.70; 1913, $1.50 to $1.75; 1920, November, $5.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.15	$3.15	$3.15	$3.15
February	3.15	3.15	3.15	3.15
March	3.15	3.15	3.15	3.15
April	3.15	3.15	3.40	3.15
May	3.15	3.15	3.40	3.40
June	3.15	3.15	3.40	3.40
July	3.15	3.15	3.40	3.40
August	3.15	3.15	3.40	3.40
September	3.15	3.15	3.40	3.40
October	3.15	3.15	3.40	3.40
November	3.15	3.15	3.40	3.40
December	3.15	3.15	3.40	3.40
Year	3.15	3.15	3.40	3.15

Putty, Commercial

October 18, 1871, the price in 12½-lb. tins was 3¾c. to 4¼c.; 1881, 2½c. to 2¾c.; 1891, 2¾c. to 2½c.; 1901, 2¼c.; 1911, 1½c. to 2c.; 1913, 1 to 5-lb. tins, $1.50 to $1.90 per 100 pounds; 1918, July, $7.40.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.25	$3.25	$3.25	$3.25
February	3.25	3.25	3.25	3.25
March	3.25	3.25	3.25	3.25
April	3.25	3.25	3.25	3.25
May	3.25	3.25	3.25	3.25
June	3.25	3.25	3.25	3.25
July	3.25	3.25	3.25	3.25
August	3.25	3.25	3.25	3.25
September	3.25	3.25	3.25	3.25
October	3.25	3.25	3.25	3.25
November	3.25	3.25	3.25	3.25
December	3.25	3.25	3.25	3.25
Year	3.25	3.25	3.25	3.25

Silica (Works, Bulk)

January 25, 1888, the price was $14 to $25; October 18, 1891, $14 to $25; 1901, $12 to $18; 1911, $12 to $40; 1913, $12 to $40; 1918, July, $40.

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$11.00	$11.00	$8.00	$8.00
February	11.00	11.00	8.00	8.00
March	11.00	11.00	8.00	8.00
April	11.00	11.00	8.00	8.00
May	11.00	8.00	8.00	8.00
June	8.00	8.00	8.00	8.00
July	8.00	8.00	8.00	8.00
August	8.00	8.00	8.00	8.00
September	8.00	8.00	8.00	8.00
October	8.00	8.00	8.00	8.00
November	8.00	8.00	8.00	8.00
December	8.00	8.00	8.00	8.00
Year	11.00	8.00	8.00	8.00

Terra Alba, American, No. 1

October 24, 1888, the price was 65c. to 70c.; October 18, 1891, $1; 1901, 65c. to 85c.; 1911, 75c. to 80c.; 1913, 75c. to 80c.; 1921, January, $2.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.25	$1.25	$1.25	$1.25
February	1.25	1.25	1.25	1.25
March	1.25	1.25	1.25	1.25
April	1.25	1.25	1.25	1.25
May	1.25	1.25	1.25	1.25
June	1.25	1.25	1.25	1.25
July	1.25	1.25	1.25	1.25
August	1.25	1.25	1.25	1.25
September	1.25	1.25	1.25	1.25
October	1.25	1.25	1.25	1.25
November	1.25	1.25	1.25	1.25
December	1.25	1.25	1.25	1.25
Year	1.25	1.25	1.25	1.25

Talc, American

November 30, 1891, the price was $1 to $1.25 per 100 pounds; October 18, 1901, 90c. to $1.10; 1911, $15 to $20 per ton; 1913, $15 to $20; 1918, July, $40.

(Bags, f.o.b. mines)

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$16.00	$16.00	$16.00	$16.00
February	16.00	16.00	16.00	16.00
March	16.00	16.00	16.00	16.00
April	16.00	16.00	16.00	16.00
May	16.00	16.00	16.00	16.00
June	16.00	16.00	16.00	16.00
July	16.00	16.00	16.00	16.00
August	16.00	16.00	16.00	16.00
September	16.00	16.00	16.00	16.00
October	16.00	16.00	16.00	16.00
November	16.00	16.00	16.00	16.00
December	16.00	16.00	16.00	16.00
Year	16.00	16.00	16.00	16.00

Whiting, Commercial

October 18, 1871, the price was 1c. per pound; 1881, 50c. to 55c. per 100 pounds; 1891, 70c. to 75c.; 1901, 40c. to 60c.; 1911, 45c. to 60c.; 1913, 45c. to 50c.; 1920, April, $1.40.

	Per 100 pounds			
	1926.		1927.	
	H.	L.	H.	L.
January	$1.00	$1.00	$0.85	$0.85
February	1.00	1.00	.85	.85
March	1.00	1.00	.85	.85
April	1.00	1.00	.85	.85
May	1.00	.85	.85	.85
June	.85	.85	.85	.85
July	.85	.85	.85	.85
August	.85	.85	.85	.85
September	.85	.85	.85	.85
October	.85	.85	.85	.85
November	.85	.85	.85	.85
December	.85	.85	.85	.85
Year	1.00	.85	.85	.85

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Varnish Gums

Congo, Water White

On February 8, 1909, the price was 30c. to 35c.; October 18, 1911, 30c. to 35c.; 1913, 30c. to 34c.; 1918, July, 45c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.37	$0.37	$0.37	$0.37
February	.37	.37	.37	.37
March	.37	.37	.37	.37
April	.37	.37	.37	.37
May	.37	.37	.37	.37
June	.37	.37	.37	.37
July	.37	.37	.37	.37
August	.37	.37	.37	.37
September	.37	.37	.37	.37
October	.37	.37	.37	.37
November	.37	.37	.37	.37
December	.37	.37	.37	.37
Year	.37	.37	.37	.37

Dammar, Batavia

October 18, 1871, the price was 13c.; 1881, 18c. to 21c.; 1891, 16c. to 18c.; 1901, 12½c. to 13½c.; 1911, 12½c. to 12¾c.; 1913, 20c. to 21c.; 1920, March, 60c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.29½	$0.28½	$0.26	$0.25½
February	.28	.25	.25½	.25
March	.25¼	.25	.25	.25
April	.25	.25	.24¾	.24½
May	.25¼	.25	.25¼	.25
June	.27	.25¼	.25¼	.24¾
July	.28	.27½	.24¾	.24
August	.27¾	.27	.24	.24
September	.28	.27	.24	.23¾
October	.28	.27½	.23¾	.23½
November	.27¼	.27	.23½	.23
December	.27½	.26	.23	.22¼
Year	.29½	.25	.26	.22¼

Kauri, Pale, No. 1

October 18, 1871, the price for ordinary to prime was 11c. to 12c.; 1881, 10c. to 15c.; 1891, 13½c. to 14½c.; 1901, 26c. to 30c.; 1911, 20c. to 24c.; 1913, 50c.; 1920, March, 60c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.57	$0.57	$0.55	$0.55
February	.57	.57	.55	.55
March	.57	.57	.55	.55
April	.57	.55	.55	.55
May	.55	.55	.55	.55
June	.55	.55	.55	.55
July	.55	.55	.55	.55
August	.55	.55	.55	.55
September	.55	.55	.55	.55
October	.55	.55	.55	.55
November	.55	.55	.55	.55
December	.55	.55	.55	.55
Year	.57	.55	.55	.55

Manila, Pale, Nubs

August 22, 1877, the price was 7½c. to 8c.; March 18, 1881, 10c. to 18c.; October 18, 1891, 17c. to 25c.; 1901, 14c. to 16c.; 1911, 15c. to 18c.; 1913, 15c. to 18c.; 1920, May, 30c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.16	$0.14	$0.14	$0.14
February	.16	.14¾	.14	.14
March	.14¾	.14¾	.14	.14
April	.14¾	.14¾	.14	.14
May	.14¾	.14¾	.14	.14
June	.14¾	.14	.14	.14
July	.14	.14	.14	.14
August	.14	.14	.14	.14
September	.14	.14	.14	.14
October	.14	.14	.14	.14
November	.14	.14	.14	.14
December	.14	.14	.14	.14
Year	.16	.14	.14	.14

Pontianak, Nubs, No. 1

July 1, 1907, the price was 17c.; October 18, 1911, 12½c. to 13½c.; 1913, 13½c. to 15c.; 1919, December, 45c.

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.14	$0.14	$0.15	$0.15
February	.14½	.14	.15	.15
March	.13	.13	.14¾	.14¾
April	.17	.15½	.13¾	.14¾
May	.16	.15½	.14¾	.14¾
June	.15¼	.15¼	.14¾	.14¾
July	.15¼	.15¼	.14¾	.14¾
August	.15¼	.15	.14¾	.14½
September	.15	.15	.14½	.14
October	.15	.15	.14	.14
November	.15	.15	.14	.13½
December	.15	.15	.13½	.13½
Year	.17	.13	.15	.13½

Gilsonite

May 27, 1907, the price was 2½c. to 3½c. per pound; October 18, 1911, $36 to $50 per ton; 1913, $36 to $50; 1919, March, $60.

(Bags, f.o.b. works)

	Per pound			
	1926.		1927.	
	H.	L.	H.	L.
January	$51.00	$51.00	$51.00	$51.00
February	51.00	51.00	51.00	51.00
March	51.00	51.00	51.00	51.00
April	51.00	51.00	51.00	51.00
May	51.00	51.00	51.00	51.00
June	51.00	51.00	51.00	51.00
July	51.00	51.00	51.00	51.00
August	51.00	51.00	51.00	51.00
September	51.00	51.00	51.00	51.00
October	51.00	51.00	51.00	51.00
November	51.00	51.00	51.00	51.00
December	51.00	51.00	51.00	51.00
Year	51.00	51.00	51.00	51.00

(Continued on page 94)

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Naval Stores: Market Review

The trend of prices in Southern and local naval stores markets was downward much of the time in 1927. This trend followed two years of extremely high prices and was due to a marked increase in production. The big increase in the output of naval stores was the result of the abnormal prices prevailing during 1925 and 1926. In the former years all grades of rosin scored an advance of more than 100 percent as compared with the preceding year, but substantially higher prices were recorded during 1926 for some grades. WW rosin, for instance, rose in the New York market in 1926 to $18.75 per unit as compared with a high of $16.70 in 1925. In 1924 the highest price touched for WW rosin was $9.90 per unit, while in the same year it sold at $7.35 per unit. Turpentine and minor naval stores also advanced in the two years preceding 1927 to extremely high levels.

These abnormal values had the usual effect of stimulating operations in the South, and although rosin, turpentine and other products of the pine tree were still selling at exceptionally high prices in the early weeks of 1927 they soon commenced to move downward under the depressing influence of a big increase in the output. Late in the year decreasing receipts and expectations of a sharp and permanent falling off in the movement early in 1928 created a steadier feeling in Southern and local markets, but quotations prevailing at the close of last year were, as a rule, not far from the lowest recorded during the period.

Turpentine prices in the New York market during 1927 covered a range of 37½c. per gallon, the highest point recorded being established in January when there were sales at 87½c. per gallon. The lowest price touched during the year was recorded in November when the market dropped to 50c. per gallon. The Savannah market in November fell to 42c. per gallon. The high point reached in the New York market last year was 26c. per gallon below the high of the previous year, while the low point of last season was 63½c. per gallon below the high of the previous season and 34½c. per gallon under the lowest price recorded during the latter year. In the final month of the past year there was a moderate recovery in prices in Southern and local markets owing to a falling off in receipts and the feeling in the South and here was better, although it was contended by some in the trade that current prices were still below the cost of production.

As a result of the sharp decline in prices last year trade with foreign countries showed a material increase over recent preceding years. The exports of gum spirits from the United States to all foreign countries during 11 months of the year ended with November, 1927, were 14,463,086 gallons against 9,988,429 gallons in the same time in the previous year. The value of the exports of gum spirits last year, however, was smaller than in the previous year, the total for eleven months ended with November being $8,794,293 against $9,253,211 in the corresponding period in the previous year.

The exports of wood turpentine last year, on the other hand, were smaller than in the previous year, the decrease being attributed to lessened consumption abroad, owing to the cheapness of gum spirits. Exports of wood turpentine during eleven months of 1927 ended with November were 620,318 gallons, as compared with 629,770 gallons in the corresponding period in the previous year. The value of the wood turpentine exported during eleven months of 1927 was $366,436 against $484,996 in the same time in the previous year. Stocks of gum turpentine in the London market at the close of last year were more than double what they were at the end of the previous year.

Turpentine Trading Slow

Domestic trade in turpentine during the past year was on a conservative scale so far as the consuming demand was concerned. With the indications pointing to a large increase in production and with prices moving steadily downward, consumers saw no reason for purchasing beyond their requirements at any time during the year. Prospects late in the year of a falling off in receipts with the turn of the year failed to change this attitude on the part of consumers.

The big drop in turpentine prices had the effect of attracting speculators to the markets here and in the South, operations of this character showing a noteworthy increase over recent preceding years, especially when the price at Savannah dropped to 50 cents per gallon or less. Not only did domestic investors purchase on a liberal scale, but there was also buying by speculators across the water. According to some in the trade purchasing by British speculators was on a scale seldom if ever before witnessed.

The shortage of pale grades of rosin experienced in 1926 was relieved last year through an increase in production, although the increase in supplies was not as great as in the case of the pale and medium grades, and the difference between prices of the low and the high grades continued rather wide. The drift of all grades, however, as already intimated, was downward during the past year. The range covered by WW rosin in the New York market last year was $9.35 per unit, the highest price recorded during the year being $18.75 per unit and the lowest $9.40. This range compared with a range of $5 per unit in the previous year and with a range of $6.70 two years ago, the high and low in those years being $18.75 and $13.75 and $16.70 and $10 respectively.

Export business in rosin last year was larger than in the previous year by a substantial margin so far as volume was concerned, though the value was somewhat smaller than in 1926. Exports of gum rosin during eleven months of last year ended with November were 1,609,516 barrels, valued at $19,069,277, against 859,582 barrels, valued at $19,798,370, in the corresponding period in 1926.

Domestic trade in rosin, like that in turpentine, was generally on a moderate scale during the year. The aggregate movement into consuming channels was apparently well up to normal and in some lines was larger than in the previous year, but consumers, in view of the downward trend of prices and the indications of a material increase in production, were not inclined to stock up, despite the relatively low prices prevailing. Speculative buying was something of a feature of the situation during the year, the demand from speculators at home and abroad showing a considerable increase over recent preceding years.

New Rosin Standard

At the close of last year the government established a new standard, effective April 1, 1928, for rosin redder in color than is covered by old standards. The new grade is FF rosin and applies to rosin which because of the redder color cannot be graded under the other United States standards. The standard for FF rosin is the type which has been prepared by the Department of Agriculture and designated FF. The grade of the rosin shall be determined by designating it as "gum rosin" or "wood rosin," as the case may be. The naval stores act is mandatory in requiring that rosin be sold under or by reference to the United States standards. It provides for three months' notice of the establishment and promulgation of a new standard, after which rosin corresponding to such an established standard may not enter into interstate commerce except under or by reference to the standard.

The trend of most of the minor naval stores was also downward during much of the time last year, in company with turpentine and rosin. Changes in quotations, however, were rather moderate, though in some instances the shrinkage in values for the year was important. Consumers adhered to a conservative course in making purchases in view of the downward drift of prices, but consumption for the year apparently was well up to the normal, while export trade showed an increase over the previous year in both volume and values. The exports of tar and pitch during eleven months of the year were about 13,500 barrels larger than in the corresponding period in the previous year.

Turpentine

Changes in turpentine quotations in Southern and local markets were sharp at times last year. The range between the highest and the lowest prices recorded in the New York market during the year was 37½c. per gallon, the high being 87½c., and the low, 50c. per gallon. In the previous year the range was 26c. per gallon, the highest price being $1.13½ per gallon, and the lowest 84½c. In 1925 the range between the highest and the lowest prices touched in the New York market was 29c. per gallon.

At the opening of last year gum spirits in the local market was quoted at 87½c. per gallon. In February there was a decline to 71c. per gallon, showing a drop of 16½c. per gallon. In March the price recovered to 78c., after which the trend was downward for a time, the market declining to 66½c. in April, 63c. in May, 54c. in June, and 52½c. in July, when a temporary upturn occurred, the market rallying to 60c. in August. The price then took a downward course, declining to 55½c. in September, 52c. in October, and 50c. in November. The price established in the last named month was the lowest of the year. In December there was a recovery in the New York market to 57½c.

The rally in the market during the final month of the calendar year created a more cheerful feeling in trade circles here and in the South, although the price was materially below that ruling at the close of the previous year. The indications, however, pointed to a sharp drop in the production and marketing of turpentine after the turn of the year and the belief existed that a decrease in the receipts at primary points would be likely to stimulate interest in the market on the part of consumers of turpentine, especially as consumption at the low prices prevailing appeared to be increasing at the expense of turpentine substitutes.

Receipts of turpentine in the three principal markets in the South from the opening of the season to the close of December were, roughly, 383,500 barrels, as compared with 287,600 during the same time in the previous year and 270,000 two years ago. Stocks in those markets at the close of December were about 83,000 barrels, against 62,000 in the previous year and 33,000 two years ago.

Rosin

The highest prices recorded for rosin in the New York market during 1927 were established early in the year. In January W W rosin sold here at $18.75 per unit, which was the highest price touched during the year. It declined to $18.50 per unit in February, to $16.50 in March, $16 in April, $12.90 in May, $10.85 in June and $9.40 in July, after which there was a rally. The market recovered to $12 in August and advanced to $13.40 in September. It declined to $11.85 in October and to $11.75 in November, the latter price being the lowest of the year. In December there was a recovery to $12.40 per unit, showing a decline of $6.35 per unit, as compared with the closing of the previous year.

Net changes in the dark grades for the year were not as marked as in the pale descriptions, though there were frequent sharp fluctuations during the period. The highest price recorded for B rosin during the year was $12.75 per unit. This was established in January. The price soon took a downward course, dropping to $11.50 in February, $9.60 in March and $9.50 in April. There was a recovery to $9.75 in May and to $10 in June, after which the price dropped to $8.95 in July. There was an advance to $10.80 in August, followed by a decline to $10 in September, $8.70 in October and $7.90 in November, which was the lowest price touched during the year. In December there was a recovery to $9.15 per unit. This compared with a high of $12.90 in December of the previous year.

Although consumption of rosin at home and abroad last year was considered larger than in the previous year as a result of the sharp decline in prices, purchasing by consumers was on a conservative scale much of the time, the largely increased production and the downward drift of prices making consumers averse to purchasing far ahead of requirements. Sentiment in trade circles at the close of the year was more optimistic than earlier in the season, as there were indications that a perpendicular and permanent drop in receipts was at hand. Also agitation was widespread in the south for a curtailment of production in 1928 and this had a tendency to create a more cheerful feeling regarding the prospects for the coming season.

Minor Naval Stores

Variations in pine oil prices in the local market during 1927 were small in comparison with the previous year, the range between the highest and the lowest quotations last year being only 5 cents per gallon. This compared with a range of 10 cents per gallon in the year before last. The highest price recorded for steam distilled pine oil last year was 72 cents per gallon. This price was reached in May. It compared with a high in the previous year of 70 cents per gallon. The low price last year was 67c. per gallon, this level being recorded in November. It compared with a low in the previous year of 60c. per gallon. At the close of last year the market here was 68c. per gallon, as compared with 70c. per gallon at the end of the previous year.

Pitch in the New York market last year moved within a range of $2 per barrel. This compared with a range of $1 per barrel in the previous year. The highest price recorded last year was $9.50 per barrel and the lowest $7.50 per barrel, against $9 and $8 respectively in the previous year. At the opening of last year $9 was the minimum price quoted, and this figure remained in effect until April, when the market advanced to $9.50 per barrel. It dropped in May to $8.50 per barrel and in June to $7.50, the latter continuing in effect during the remainder of the year.

Rosin oil in the local market fluctuated within a range of 18 to 20 cents per gallon during the year, which compared with a range of 25 cents per gallon in the previous year. First rectified during the first quarter of 1927 was held at 70c. per gallon. It declined in April to 65c. per gallon and in May to 55c., recovering in July to 58c. and then declining in October to 55c. and in November to 52c., which was the lowest price recorded during the year. In the previous year the high was 80c. per gallon and the low 55c. Third rectified rosin oil at the opening of last year was quoted at 80c. per gallon, which was the highest price touched during the year and compared with a high in the previous year of 90 cents. The low for third rectified last year was 60c. per gallon, against a low of 55c. in the previous year.

Tar in the local market covered a range of $3.50 per barrel. This compared with a range in the previous year of $1 per barrel. The highest price recorded last year was $16 per barrel, this figure being established in May. It compared with the same high in the previous year. The lowest price recorded for kiln burned during the past year was $12.50 per barrel, which compared with a low in the previous year of $15 per barrel.

Naval Stores: Record of Prices

Turpentine

Turpentine, Gum Spirits

October 18, 1871, the price was 71c. to 73c.; 1881, 52c. to 53c.; 1891, 37c. to 37½c.; 1901, 38c. to 38½c.; 1911, 51c.; 1913, 45c. to 45½c.; 1920, April, $2.65.

	Per gallon 1926. H.	1926. L.	1927. H.	1927. L.
January	$1.13½	$1.01	$0.87½	$0.87½
February	1.03	.97½	.79½	.71
March	1.02½	.96	.78	.72½
April	1.02	.93	.70	.66½
May	.89	.86	.64½	.63
June	.89	.86	.62	.54
July	.90½	.87	.62	.52½
August	1.00	.92½	.60	.58½
September	.94½	.92	.67	.55½
October	.94	.91	.54	.52
November	.93½	.87½	.51½	.50
December	.90½	.84½	.57½	.51½
Year	1.13½	.84½	.87½	.50

Turpentine, Wood, Steam Distilled

May 13, 1907, the price was 63½c.; October 18, 1911, 50c.; 1913, 30c. to 35c.; 1920, June, $2.30.

	Per gallon 1926. H.	1926. L.	1927. H.	1927. L.
January	$0.92	$0.87	$0.82	$0.77
February	.90	.90	.76	.67
March	.90	.90	.72	.67
April	.90	.85	.68	.64
May	.85	.75	.62	.61
June	.80	.77	.61	.53
July	.90	.80	.58	.51½
August	.86	.82	.56	.55
September	.92	.92	.54	.52
October	.92	.92	.50	.50
November	.84	.84	.47	.46
December	.84	.82	.52	.47
Year	.92	.75	.82	.46

Turpentine, Wood, Destructive Distilled

May 13, 1907, the price was 63½c.; October 18, 1911, 45c.; 1913, 25c. to 30c.; 1919, November, $1.60.

	Per gallon 1926. H.	1926. L.	1927. H.	1927. L.
January	$0.82	$0.78	$0.66	$0.64
February	.80	.70	.64	.60
March	.70	.70	.64	.60
April	.70	.70	.64	.62
May	.70	.68	.56	.56
June	.70	.68	.56	.50
July	.70	.70	.56	.50
August	.75	.72	.48	.48
September	.70	.70	.48	.48
October	.70	.70	.42	.42
November	.66	.66	.42	.40
December	.66	.66	.46	.42
Year	.82	.66	.66	.40

Rosins

Rosin, Grade B

October 18, 1871, the price was $4.10 to $4.17½; 1881, $2.50 to $2.52½; 1891, $1.32½ to $1.35; 1901, $1.42; 1911, $0.90; 1913, $3.95 to $4.25; 1920, May, $20.

	Per unit 1926. H.	1926. L.	1927. H.	1927. L.
January	$14.65	$13.50	$12.05	$12.75
February	14.00	13.40	12.15	11.50
March	12.25	10.00	10.65	9.60
April	9.60	8.40	10.10	9.50
May	9.75	7.50	9.75	9.65
June	12.50	10.50	10.00	9.60
July	14.45	12.60	10.25	8.95
August	15.40	14.50	10.80	10.50
September	14.75	14.00	10.40	10.00
October	14.50	13.50	9.10	8.70
November	13.40	13.20	8.50	7.90
December	12.90	12.20	9.15	7.95
Year	15.40	7.50	12.15	7.90

Rosin, Grade I

February 15, 1881, the price was $2.50; October 18, 1881, $7.50; 1891, $2; 1901, $1.75; 1911, $7.10; 1913, $4.10 to $4.15; 1919, September, $21.25.

Per unit

	1926. H.	1926. L.	1927. H.	1927. L.
January	$15.75	$14.00	$13.10	$12.35
February	15.10	14.75	13.25	13.15
March	14.50	14.00	13.10	11.85
April	14.05	13.50	11.85	11.15
May	12.50	11.25	10.85	10.60
June	14.50	13.05	10.40	9.75
July	15.25	14.05	10.40	9.00
August	16.85	15.25	11.15	10.60
September	16.25	15.25	10.50	10.15
October	15.50	13.60	9.30	8.75
November	13.60	13.25	8.60	8.10
December	13.10	12.40	9.40	8.15
Year	16.85	11.25	13.25	8.10

Rosin, Grade K

February 15, 1881, the price was $2.75; October 18, 1891, $2.20; 1901, $2.30; 1911, $7.15; 1913, $4.70 to $4.80; 1919, July, $22.75.

Per unit

	1926. H.	1926. L.	1927. H.	1927. L.
January	$15.80	$15.35	$15.10	$12.45
February	15.65	15.50	14.65	14.25
March	15.50	15.40	13.85	11.95
April	15.25	14.00	11.85	11.15
May	13.50	11.75	10.90	10.65
June	14.60	13.20	10.25	9.50
July	15.30	14.60	10.40	9.00
August	16.85	15.35	11.20	10.60
September	16.25	15.25	10.55	10.20
October	15.50	13.65	9.35	8.80
November	13.60	13.25	8.75	8.20
December	15.00	13.85	9.60	8.20
Year	16.85	11.75	15.10	8.20

Rosin, Grade WW

January 21, 1885, the price was $5; October 18, 1891, $4; 1901, $4.10; 1911, $8; 1913, $6.95 to $7.10; 1919, September, $25.50.

Per unit

	1926. H.	1926. L.	1927. H.	1927. L.
January	$16.60	$16.60	$18.75	$18.30
February	16.70	16.70	18.65	18.50
March	16.70	16.50	18.30	16.50
April	16.50	15.50	16.50	16.00
May	15.50	13.75	15.25	12.90
June	16.90	14.50	12.80	10.85
July	15.95	16.50	10.60	9.40
August	17.60	16.65	13.25	12.00
September	17.60	17.30	13.40	12.60
October	17.30	16.25	12.35	11.85
November	17.15	16.60	12.00	11.75
December	18.75	17.75	12.40	11.75
Year	18.75	13.75	18.75	9.40

Other Naval Stores

Pine Oil, Steam Distilled

June 13, 1912, the price was 35c. to 45c.; October 18, 1913, 35c. to 45c.; 1920, July, $2.10.

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.60	$0.60	$0.70	$0.70
February	.60	.60	.70	.70
March	.60	.60	.70	.70
April	.60	.60	.70	.70
May	.60	.60	.72	.72
June	.60	.60	.72	.68
July	.60	.60	.68	.68
August	.60	.60	.68	.68
September	.70	.70	.68	.68
October	.70	.70	.67	.67
November	.70	.70	.67	.68
December	.70	.70	.68	.67
Year	.70	.60	.72	.67

Rosin Oil, First Rectified

October 18, 1871, the price was 28c.; 1881, 14½c.; 1891, 10c. to 10½c.; 1901, 15c.; 1911, 36c.; 1913, 27c.; 1920, January, 97c.

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.78	$0.78	$0.70	$0.70
February	.78	.78	.70	.70
March	.78	.60	.70	.70
April	.60	.60	.70	.65
May	.60	.55	.65	.55
June	.75	.60	.55	.55
July	.75	.75	.58	.55
August	.80	.78	.58	.58
September	.80	.80	.58	.58
October	.80	.80	.55	.55
November	.75	.75	.55	.52
December	.75	.70	.55	.52
Year	.80	.55	.70	.52

Rosin Oil, Third Rectified

October 18, 1871, the price was 35c.; 1881, 20½c.; 1891, 14c. to 14½c.; 1901, 19c.; 1911, 46c.; 1913, 48c.; 1920, March, $1.15.

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.90	$0.90	$0.80	$0.80
February	.90	.90	.78	.78
March	.90	.72	.78	.78
April	.72	.72	.78	.75
May	.72	.65	.75	.62
June	.83	.70	.62	.62
July	.83	.73	.67	.62
August	.90	.88	.67	.65
September	.90	.90	.60	.60
October	.90	.90	.60	.60
November	.85	.85	.62	.62
December	.85	.80	.65	.62
Year	.90	.65	.80	.60

Pitch

October 18, 1871, the price was $4 to $4.25; 1881, $2.25 to $2.30; 1891, nominal; 1901, $1.60 to $1.75; 1911, $4 to $4.50; 1913, $4.25 to $4.50; 1920, June, $15.

Per barrel

	1926. H.	1926. L.	1927. H.	1927. L.
January	$8.50	$8.50	$9.00	$9.00
February	8.50	8.50	9.00	9.00
March	8.50	8.00	9.00	9.00
April	8.00	8.00	9.50	9.00
May	8.00	8.00	9.50	8.50
June	8.00	8.00	8.50	7.50
July	8.00	8.00	7.50	7.50
August	9.00	9.00	7.50	7.50
September	9.00	9.00	7.50	7.50
October	9.00	9.00	7.50	7.50
November	9.00	9.00	7.50	7.50
December	9.00	9.00	7.50	7.50
Year	9.00	8.00	9.50	7.50

Tar, Kiln Burned

October 18, 1871, the price was $3.25 to $3.37½; 1881, $3.25; 1891, $1.80; 1901, $1.90; 1911, $7.75; 1913, $7; 1920, February, $15.50

Per barrel

	1926. H.	1926. L.	1927. H.	1927. L.
January	$15.00	$15.00	$15.50	$15.50
February	15.00	15.00	15.50	15.50
March	15.00	15.00	15.50	15.50
April	15.00	15.00	15.50	15.50
May	15.00	15.00	16.00	12.50
June	15.50	15.00	12.50	12.50
July	15.50	15.50	12.50	12.50
August	16.00	16.00	12.50	12.50
September	15.50	15.50	12.50	12.50
October	15.50	15.50	12.50	12.50
November	15.50	15.50	12.50	12.50
December	15.50	15.50	12.50	12.50
Year	16.00	15.00	16.00	12.50

Paint, Varnish Materials

(Continued from page 92)

Lacquer Materials

Butyl Acetate

(In drums)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$2.28	$2.28	$1.47	$1.47
February	2.28	1.55	1.47	1.47
March	1.55	1.55	1.47	1.45
April	1.55	1.55	1.45	1.45
May	1.55	1.55	1.52	1.45
June	1.55	1.55	1.52	1.52
July	1.57	1.57	1.52	1.52
August	1.57	1.45	1.57	1.57
September	1.45	1.40	1.57	1.57
October	1.45	1.40	1.57	1.57
November	1.45	1.45	1.57	1.57
December	1.47	1.47	1.57	1.57
Year	2.28	1.40	1.57	1.45

Butyl Alcohol

(In drums)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.19½	$0.19½	$0.19¼	$0.19
February	.19	.19	.19¼	.19
March	.19	.19	.19½	.19½
April	.19	.19	.19½	.19½
May	.19	.18½	.19	.18¾
June	.18¾	.18¼	.18¾	.18¾
July	.18¼	.18	.19¾	.19¾
August	.18¼	.18	.19½	.19½
September	.19½	.19¼	.19½	.19½
October	.19½	.19½	.19½	.19½
November	.19½	.19¼	.19½	.19½
December	.19¼	.19	.19¾	.18¾
Year	.19½	.18	.19¾	.18¾

Butyl Propionate

(In drums)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.39	$0.39	$0.32	$0.32
February	.39	.39	.32	.32
March	.39	.39	.32	.31
April	.39	.39	.31	.31
May	.39	.37	.31	.31
June	.37	.37	.31	.31
July	.37	.37	.31	.31
August	.37	.37	.31	.31
September	.37	.32	.31	.31
October	.34	.32	.31	.31
November	.34	.34	.31	.31
December	.32	.32	.31	.31
Year	.39	.32	.32	.31

Cellulose Acetate

(In bags)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.65	$1.35	$1.40	$1.40
February	1.35	1.35	1.40	1.35
March	1.35	1.35	1.35	1.35
April	1.45	1.35	1.35	1.35
May	1.45	1.45	1.35	1.35
June	1.45	1.45	1.35	1.35
July	1.45	1.45	1.25	1.25
August	1.40	1.40	1.25	1.25
September	1.40	1.40	1.35	1.25
October	1.40	1.40	1.25	1.25
November	1.40	1.40	1.25	1.25
December	1.40	1.40	1.25	1.25
Year	1.65	1.35	1.40	1.25

Dibutyl Phthalate

(In drums)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.45	$0.45	$0.33	$0.32
February	.45	.45	.33	.32
March	.45	.45	.33	.30
April	.45	.45	.30	.30
May	.45	.45	.30	.30
June	.45	.45	.30	.30
July	.45	.45	.30	.30
August	.33	.33	.29½	.29½
September	.33	.33	.29½	.29½
October	.33	.33	.29½	.29½
November	.33	.33	.29½	.29½
December	.33	.33	.29½	.29½
Year	.45	.33	.33	.29½

Ethyl Acetate Anhydrous

(In tanks)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.05	$1.05	$0.92	$0.92
February	1.05	1.05	.92	.92
March	1.05	1.05	.92	.92
April	1.05	1.05	.92	.92
May	1.05	1.05	1.05	.92
June	1.05	1.00	1.05	1.05
July	1.00	1.00	1.05	1.05
August	1.00	.94	1.05	1.05
September	.94	.94	1.05	1.05
October	.94	.94	1.05	1.05
November	.94	.94	1.05	1.05
December	.94	.94	1.05	1.05
Year	1.05	.94	1.05	.92

Ethyleneglycol Monoethyl Ether

(In tanks)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	..	..	..	..
February	..	..	..	..
March	..	..	..	..
April	..	..	..	..
May	..	..	..	..
June	..	..	$0.27½	$0.27½
July	..	..	.27½	.27½
August	..	..	.27½	.27½
September	..	..	.27½	.27½
October	..	..	.27½	.21
November	..	..	.21	.21
December	..	..	.21	.21
Year	..	..	.27½	.21

Buyers Prefer

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Market Information because it is Definite and Accurate

Nitrocellulose, Regular

(In drums)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.40	$0.40	$0.40	$0.40
February	.40	.40	.40	.40
March	.40	.40	.40	.40
April	.40	.40	.40	.40
May	.40	.40	.40	.40
June	.40	.40	.40	.40
July	.40	.40	.40	.40
August	.40	.40	.40	.40
September	.40	.40	.40	.40
October	.40	.40	.40	.40
November	.40	.40	.40	.40
December	.40	.40	.40	.40
Year	.40	.40	.40	.40

Tricresyl Phosphate

(In drums)

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.50	$0.50	$0.36	$0.36
February	.50	.50	.36	.36
March	.50	.50	.36	.36
April	.50	.50	.36	.36
May	.50	.36	.36	.36
June	.36	.36	.36	.36
July	.36	.36	.36	.36
August	.36	.36	.36	.36
September	.36	.36	.36	.36
October	.36	.36	.36	.36
November	.36	.36	.36	.36
December	.36	.36	.36	.36
Year	.50	.36	.36	.36

Glues

Cabinet

(Low grade)

October 18, 1871, the quotation for white glue was 35c. to 50c.; 1881, 15c. to 24c.; 1891, 14c. to 25c.; 1901, 18c. to 23c.; 1911, 18c. to 24c.; 1913, 13c. to 15c.; 1917, October, 17c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.14	$0.14	$0.16	$0.16
February	.15	.14	.17	.16
March	.15	.15	.17	.17
April	.15	.15	.18	.17
May	.15	.15	.18	.18
June	.15	.15	.18	.18
July	.15	.15	.18	.18
August	.15	.15	.18	.18
September	.15	.15	.18	.18
October	.15	.15	.18	.18
November	.16	.15	.19	.18
December	.16	.16	.19	.18
Year	.16	.14	.19	.16

Common Bone

October 18, 1871, the price was 18c. to 23c.; 1881, 8c. to 11c.; 1891, 7c. to 9c.; 1901, 6½c. to 8c.; 1911, 7½c. to 9c.; 1913, 7½c. to 9c.; 1917, August, 25c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12	$0.12	$0.13	$0.13
February	.12	.12	.14	.13
March	.12	.12	.14	.14
April	.12	.12	.14½	.14
May	.12	.12	.15	.14½
June	.12	.12	.15	.15
July	.12	.12	.15	.15
August	.12	.12	.15	.15
September	.12	.12	.15	.15
October	.12	.12	.16	.15
November	.13	.12	.16	.16
December	.13	.13	.16	.16
Year	.13	.12	.16	.13

Extra White

November 1, 1876, the price was 38c.; October 18, 1881, 27c. to 35c.; 1891, 18c. to 25c.; 1901, 18c. to 23c.; 1911, 18c. to 24c.; 1913, 18c. to 24c.; 1917, November, 45c.

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.20	$0.20	$0.19½	$0.19½
February	.20	.20	.20	.19¼
March	.20	.20	.20	.20
April	.20	.19½	.20	.20
May	.19½	.19½	.20	.20
June	.19½	.19½	.20	.20
July	.19½	.19½	.20	.20
August	.19½	.19½	.20	.20
September	.19½	.19½	.20	.20
October	.19½	.19½	.20	.20
December	.19½	.19½	.22	.22
December	.19½	.19¼	.22	.22
Year	.20	.19½	.22	.19½

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Miscellaneous Oils: Market Review

The market for miscellaneous oils, fats and greases was characterized during 1927 by conservative transactions and moderate changes in prices. At times certain vegetable and animal products displayed unusual activity, but demand for most commodities during the year was confined to unimportant quantities, consumers in many instances being averse to purchasing beyond their immediate or nearby requirements. The movement into consuming channels was steady, however, and the consumption of most products for the year appeared to be well up to the normal. At the close of the period stocks of not a few vegetable, animal and fish products were light.

The range of prices during the year, as already intimated, was not very wide, taking the market as a whole, although some products fluctuated sharply over periods of a few weeks from time to time. In general, however, variations in quotations were confined within narrower limits than in recent preceding years.

At the opening of last year the Oil, Paint and Drug Reporter's price index number for twenty-three representative oils, fats and greases was 142.0, compared with 158.9 at the opening of the previous year. At the close of last year the index number was 147.9 against 142.0 at the previous year's end. This showed that while prices at the opening of last year were lower than at the opening of the previous year, the list at the close of last year was higher than at the end of the previous year by 5.9 points.

The index number at the close of last January had advanced to 143.2 as compared with 142.0 at the opening of the month. At the close of February the index number was 144.1. It declined during the following month to 141.1 and during April to 140.7. In May and June the index number was slightly higher, 140.8 being recorded at the close of both months. In July the index number declined to 140.5, but during the next three months the trend was upward, the index number being 141.2 at the close of August, 146.1 at the end of September, and 150.6 at the close of October. In November the index number dropped to 148.6, and in December to 147.9.

The highest index number during the year was 150.6 which compared with a high in the previous year of 158.9. The latter was recorded in January, 1926. The lowest index number last year was 140.7. This was recorded in April. It compared with a low for the previous year of 139.2, this number being established in April. The range between the highest and the lowest index number last year was 9.9 points. It compared with a range in the previous year of 19.7 points.

Chinawood Oil a Feature

Chinawood oil was the leading feature of the list of vegetable products. Fluctuations in that commodity were sharp with the markets here and on the Pacific Coast excited. The principal stimulating factor was the civil war in China which interfered with the movement of oil from the interior to the coast. At times there was a marked scarcity of oil in this country and the inability to secure supplies for delivery on contracts caused the failure of a prominent San Francisco importing firm. During the first four months of the year the trend of prices in domestic markets was strongly upward, sales being reported in New York in April at 32 cents per pound in barrels. This was the highest price recorded during the year. Values remained unusually high, however, during the spring and early summer. During the last half of the year the drift of prices was downward. Political conditions in China improved and relief from the stringency prevailing in the markets of this country followed. By the close of the year the New York market had fallen to 14¾c. per pound in barrels, which compared with the high of 32c. per pound, and with 13c. at the end of the previous year.

Changes in coconut oil were confined within small limits throughout the year. At no time was there any unusual activity, consumers being disposed to follow a conservative course in the absence of stimulating developments in foreign markets. The range between the highest and the lowest prices for oil in tankcars on the Pacific Coast was less than a cent per pound. Variations in copra quotations were small in the primary and domestic markets during the year. Crude corn oil covered a range in the western market during the year of about 4 cents per pound which compared with a range in the previous year of 7 cents per pound. There was a marked shortage of supplies at times last year, production being below normal owing to the conservative attitude of buyers as a result of the cheapness of competing products.

Denatured olive oil sold at high prices during the past year, the New York market advancing to $1.80 per gallon, which compared with a high in the previous year of $1.50 per gallon. Edible oil also displayed not a little strength at times last year, the market rising 50 cents a gallon above the high point of the previous year. There was scarcity of denatured oil and a shortage of foots was also experienced, the market being practically bare of the latter product at one period. Soya bean oil was quiet, the cheapness of competing product making consumers disposed to hold aloof from the market, and changes in prices were small.

Linseed oil showed irregularity at times but in the main the trend of the market was downward, prices touching the lowest level reached in recent years. The decline was due to a fall in seed quotations as a result of large crops. In such circumstances consumers were disposed to follow a conservative course in making purchases of oil. Cottonseed oil sold at comparatively low prices early last year, but later on Southern and local markets moved upward on indications that the production of cotton for the season would probably show a sharp decrease as compared with the previous season. Cotton advanced materially and speculation for a rise in cottonseed oil futures during the spring, summer and fall was active at advancing prices.

Among the animal products, tallow displayed considerable activity during the past year. Although the price reached a high level, however, it was not as high as in the previous year. Frequent changes occurred in grease, but the fluctuations were within a narrower range than in the preceding year. Cash lard was irregular, changes being in company with the western market for futures. Domestic trade in lard was fairly active but export business was disappointing. The course of prices for animal oils was governed by trend of raw material.

There were few developments of more than ordinary interest in fish products. Business in menhaden was quiet owing to the cheapness of linseed oil. Production was below normal, as weather conditions were frequently unfavorable for fishing.

Comparative Values

Oil, Paint and Drug Reporter's index numbers, based on 100 as the average price of twenty-three representative oils and fats in August, 1914, ranged as follows by quarters over 1927:—

Jan. 1.	April 1.	July 1.	Oct. 1.	Dec. 31.
142.0	140.9	140.6	147.2	147.9

Vegetable Oils

The most interesting developments of the year in the list of vegetable products occurred in chinawood oil. Business in that product was active at times, with sharp fluctuations in prices, the civil war in China being the principal factor in the situation. Transportation in China was slow and uncertain as a result of the disturbed political conditions, and during the first half of the year there was a shortage of oil in this country. There was a range between the highest and the lowest quotations of the year in the local market of 18¾c. per pound, the highest price recorded being 32c. and the lowest 13¼c. The former was established in April and the latter in January. In the previous year the high was 19c. and the low 11½c.

Coconut oil ruled comparatively steady during the year, changes in quotations on the Pacific Coast being within a range of 7⅛c. per pound for oil in tankcars. The highest price touched during the year was 8⅜c. per pound, this price being established in October. The lowest price of the year was 7⅞c. per pound, which was touched in January and March. In the previous year the high was 10¾c. per pound and the low 7¾c. In the New York market oil in barrels covered a range of ¾c. per pound, the high being 10c. and the low 9¼c. In the previous year the high was 11¼c. and the low 9⅛c. per pound. Business in domestic markets during the year was on a conservative scale.

Crude corn oil in the west ranged from 6¼c. to 10c. per pound in tankcars at the mills, the high for the year being reached in September and the low in January. In the previous year the high was 13¼c. per pound and the low 6¼c. At times there was a shortage of supplies, production being curtailed. Changes in denatured olive oil during the year were unusually sharp and frequent, with a marked shortage of supplies. The highest price touched during the year was $1.80 per gallon, or 30c. above the high of the previous year. The lowest price recorded last year was $1.35 per gallon, or 25c. per gallon above the lowest price touched during the previous year. Edible olive oil covered a range of 50c. per gallon, with the market firm much of the time.

Olive oil foots ranged from 8⅝c. to 10½c. per pound, the highest being established in September and the lowest in July. Importations fell off sharply during the summer, leaving some quarters bare of supplies. According to a consular report, the indications were for a production of olive oil below the average last season in the Mediterranean basin.

A conference of firms in the edible oil industry, called by the Federal Trade Commission, was held in this city in December, at which an agreement was reached on a standard of 7.61 pounds to the gallon for olive oil and 7.7 pounds to the gallon for all other edible oils.

Cottonseed Oil

Cottonseed oil was more active last year than in the preceding year, with frequent sharp fluctuations in prices, especially during the spring and summer months when the trend of the market was upward, owing to prospects of a material falling off in production of cotton for the season as compared with the preceding season. Speculation for a rise in the local market for refined oil futures broadened, total sales on the New York Produce Exchange for the season being 5,237,100 barrels, or an increase of nearly 2,000,000 barrels as compared with the previous year.

Crude cottonseed oil in the Southeast covered a range last year of 3¼c. per pound. The highest was 10c. per pound and the lowest 6¾c. per pound. The former was established in September and the latter in January. The highest price reached last year, however, was 4c. per pound below the high of the previous year, while the lowest price touched last year was ½c. per pound above the low of the previous year.

Refined oil in the local spot market ranged from 8.35c. per pound to 11.50c. per pound, the high point of the year being reached in September. In the previous year the range between the highest and the lowest prices was 8.65c., the highest price being 15.90c. This was established in June. The lowest price in that year was 7.25c., which was reached in October.

At the opening of the year trading in refined oil futures was quiet, with moderate fluctuations in prices, but speculators were attracted to the market later on by prospects of a material reduction in the output of cotton and cottonseed. The acreage was cut sharply and weather conditions over many parts of the belt were unfavorable. Also frequent and excessive rains during the growing season favored the spread of weevil, with indications pointing to heavy damage from this pest.

Moreover, operations for an advance in prices were favored by the overflow of the Mississippi River and also by floods in Texas and Arkansas. Late in the summer, however, the market developed a reactionary tendency. The cotton crop in some sections turned out better than had been expected, though the yield for the year was considerably smaller than in the previous season. Developments in the markets for lard and hogs were of a depressing character. The movement of live hogs to western markets for many weeks during the fall and early winter was heavy and the trend of lard prices was steadily downward. In December the government issued a report on the cotton crop putting the yield at 12,789,000 bales against 17,779,000 bales in the previous season.

Flaxseed and Linseed Oil

The trend of prices in the markets for flaxseed and linseed oil was downward last year. Linseed oil sold at the lowest price recorded in seven years, the weakness being due to large supplies of flaxseed and the conservative attitude pursued by consumers of oil in making purchases. With supplies of flaxseed, present and prospective, liberal many consumers of linseed oil purchased merely for immediate and nearby requirements during the year, although the aggregate movement of oil into consuming channels was apparently well up to that of recent preceding years.

Cash flaxseed in the Minneapolis market had a downward trend much of the time. In January the price there was $2.31⅜ per bushel. It moved irregularly within comparatively narrow limits until May, when $2.38¾ was quoted. In June, however, the price dropped to $2.21 per bushel, while in November it had fallen to $2.05¼ per bushel, showing a decline of 33½c. per bushel from the high of the year. In the previous year the highest price was $2.58½ per bushel and the lowest $2.18. In the Buenos Aires market last year there was a decline in the price of about 25c. per bushel.

Flaxseed production in 1927 in fourteen countries, including the United States, Canada and Argentina, was estimated at 129,915,000 bushels, against 101,037,000 bushels reported for the same countries in 1926, an increase of 21.7 percent, according to an official report issued early in January, 1928. The countries reported so far produced 71.2 percent of the 1926 estimated world total, excluding China. According to reports from the International Institute of Agriculture and from trade sources the area sown to flaxseed in Russia for the 1927 season was slightly below that for 1926. Production in Europe, other than Russia, was reported to be 2.5 percent below that of last year, while the North American crop, due to an increased yield per acre in the United States, was estimated at 31,318,000 bushels, 23.9 percent above that of 1926 in spite of a reduction in the crop in Canada.

Production of flaxseed in Argentina is expected to break all records, being estimated at 85,030,000 bushels, which is 23.1 percent above that of last year. If confirmed by later estimates, this crop will be approximately 10,000,000 bushels above the previous record crop of 1925-26. The acreage sown to flaxseed in India for the 1927-28 crop year as far as reported up to about the end of December was 2,574,000 acres, or 94.1 percent of the area reported up to the same time last year and 103.1 percent of the average for the five preceding years.

Linseed oil in the local market ranged from 9.40c. to 11.50c. per pound in car lots, cooperage basis. In the previous year the range was from 10.20c. to 12.30c. per pound. The highest price reached last year was established in June while the lowest price was reached in December. The market at the close of the year remained quiet and easy, consumers apparently being as much averse to purchasing ahead as they were when the price was considerably higher.

Animal Fats and Oils

Tallow was the leading feature of this branch of the market. Producers received good prices for their output, although the market did not go as high as in the previous year. The range for special tallow last year was from 7⅛c. to 9c. per pound in car lots at works. In the previous year the range was from 6⅞c. to 9⅝c. per pound.

Changes in cash lard were frequent, fluctuations being in company with futures in the West. City lard ranged from 11.75c. to 12.75c. per pound, against 12.25c. to 17.25c. In the previous year, changes in the latter season being unusually wide. Lard compound last year ranged from 10c. to 13¾c. per pound, against 10c. to 17.25c. in the previous year.

Stearin ranged from 9c. to 13¼c. per pound, against 9⅝c. to 16c. per pound in the previous year. No. 1 lard oil ranged from $10.50 to $13.25 per 100 pounds, as compared with a range of $10.50 to $13.75 in the previous year. Changes in stearic acid were comparatively narrow, the range for the year being from 11c. to 12c. per pound for double pressed, compared with 12c. to 15¾c. per pound in the previous year.

Fish Oils

Weather conditions were frequently unfavorable for menhaden fishing last year, and the indications were for a yield of oil below normal, although better than in the previous season. Business was quiet owing to the low cost of competing products. Crude oil in the Baltimore market ranged from 40c. to 47½c. per gallon in tankcars, compared with 40c. to 52½c. in the previous year. Refined oil in the local market ranged from 58c. to 60c. per gallon in cooperage against 58c. to 70c. in the previous year. There was very little crude oil obtainable at the close of last year and stocks of refined appeared to be rather light.

The local market for Newfoundland cod oil was steady during the year, 63c. per gallon being the prevailing quotation for spot oil in cooperage. In the previous year the price ranged from 60c. to 65c. per gallon. According to reports from the primary market production last year was again below normal. Refined whale oil was stationary in the local market during the past year with business routine. Natural winter was held at 78c. per gallon. Herring oil on the Pacific Coast ranged from 40c. to 42½c. per gallon in tankcars, as compared with a range in the previous year of 42c. to 50c. per gallon.

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Consult page 27 of the weekly issues of the
Oil, Paint and Drug Reporter

Animal, Fish, Vegetable Oils: Record of Prices

Vegetable Oils

Chinawood Oil

February 4, 1905, the price was 6c. to 6¼c.; October 18, 1911, 8¾c. to 9c.; 1913, 7⅛c. to 7½c.; 1918, July, 32c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.13	$0.13	$0.16	$0.13¼
February	.13	.12½	.18½	.17½
March	.12⅝	.11⅝	.28	.24
April	.11⅝	.11⅛	.32	.30
May	.12	.11½	.28	.19
June	.15	.12	.20	.19
July	.15¼	.15	.20	.17
August	.18	.16	.18½	.16¾
September	.19	.17¾	.17⅝	.16¼
October	.17½	.15⅝	.16	.14⅞
November	.16½	.15	.15½	.15¼
December	.15¼	.13	.15½	.14⅜
Year	.19	.11⅛	.32	.14⅜

Coconut Oil, Manila

October 23, 1918, the price was 15¾c. to 16c.; 1919, July, 20¼c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11⅞	$0.11½	$0.09½	$0.09¼
February	.11¼	.10½	.09¾	.09½
March	.11¼	.11	.09½	.09¼
April	.11	.11	.09¾	.09⅜
May	.11¼	.10½	.09¾	.09⅜
June	.11½	.11¼	.09⅞	.09⅝
July	.11¼	.11	.09¾	.09⅜
August	.11¼	.10	.09¼	.09⅜
September	.10⅞	.10½	.10	.09¾
October	.10½	.10½	.10	.09⅜
November	.09¾	.09¾	.09⅞	.09⅝
December	.09½	.09¼	.09¾	.09¾
Year	.11⅞	.09½	.10	.09¼

Coconut Oil, Manila *(F.o.b. Pacific Coast)*

(In tankcars)

	1926. H.	1926. L.	1927. H.	1927. L.
January	.10¾	.10¼	.08¼	.07⅞
February	.09⅞	.09¼	.08⅜	.08¼
March	.10	.09½	.08¼	.07⅞
April	.09⅝	.09½	.08¼	.08
May	.10	.09⅝	.08¼	.08⅛
June	.10½	.10¼	.08¼	.08
July	.10	.09⅝	.08¼	.08¼
August	.09¼	.08¾	.08¼	.08¼
September	.09¼	.08⅝	.08¾	.08¼
October	.08⅝	.08⅛	.08¾	.08¾
November	.08⅛	.08	.08¾	.08⅜
December	.08	.07⅞	.08⅝	.08¼
Year	.10¾	.07⅞	.08¾	.07⅞

Coconut Oil, Ceylon, Domestic

August 14, 1916, the price was 12¾c. to 13c.; 1919, July, 20¾c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11⅞	$0.11½	$0.09¼	$0.09¼
February	.11¼	.10½	.09¾	.09½
March	.11¼	.11	.09½	.09¼
April	.11	.11	.09¾	.09⅜
May	.11¼	.10½	.09⅞	.09½
June	.11½	.11¼	.09⅞	.09⅝
July	.11¼	.11	.09⅝	.09⅜
August	.11¼	.10	.09¾	.09⅜
September	.10⅞	.10½	.10	.09¾
October	.09⅞	.09¾	.09⅞	.09⅝
November	.09½	.09¼	.09¾	.09⅜
December	.09½	.09¼	.09¾	.09¾
Year	.11⅞	.09½	.10	.09¼

Copra *(F.o.b. New York)*

April 20, 1912, the price was 9¼c. to 9½c.; 1913, 10¾c. to 10⅝c.; 1919, January, 20¾c.

(In bags)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.06⅛	$0.06¼	$0.05⅞	$0.05
February	.06⅛	.06⅛	.05⅝	.05¼
March	.06⅛	.06⅛	.05⅛	.05⅛
April	.06⅛	.06	.05¼	.05¼
May	.06	.06	.05¼	.05⅛
June	.06⅛	.06	.05¼	.05⅛
July	.06	.06	.05¼	.05⅛
August	.05⅞	.05⅞	.05⅛	.05⅛
September	.05⅝	.05⅝	.05⅛	.05⅛
October	.05⅛	.05⅜	.05⅛	.05⅛
November	.05¼	.05⅛	.05¼	.05⅛
December	.05⅛	.05⅛	.05⅜	.05¼
Year	.06⅛	.05⅛	.05⅜	.05

Copra *(F.o.b. Pacific Coast)*

On January 5, 1918, the price was 8¾c. to 9c.; 1920, January, 11¼c.

(In bags)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.06	$0.05⅞	$0.04⅝	$0.04⅞
February	.05⅞	.05⅞	.05¼	.05⅛
March	.05⅞	.05⅞	.05	.05
April	.05⅞	.05¾	.05	.05
May	.05¾	.05¾	.05⅛	.05
June	.05⅞	.05¾	.05⅛	.05
July	.05¾	.05¾	.05¼	.05
August	.05⅞	.05¾	.05⅛	.05⅛
September	.05⅞	.05⅞	.05⅛	.05⅛
October	.05¾	.05	.05⅛	.05⅛
November	.05	.04⅝	.05⅛	.05⅛
December	.04⅝	.04⅝	.05¼	.05⅛
Year	.06	.04⅝	.05¼	.04⅞

Corn Oil, Crude

March 8, 1915, the price was $7.75 to $7.85; 1920, January, $20.81.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11⅜	$0.11½	$0.10	$0.10
February	.11¼	.11¼	.10	.09¾
March	.11¼	.11¼	.09¾	.09¾
April	.11⅜	.11¼	.09¾	.09¾
May	.14	.11⅜	.10	.09¾
June	.14	.14	.11	.11
July	.14	.14	.11	.11
August	.14	.13	.11½	.11
September	.13	.12½	.11⅜	.11½
October	.12	.11	.11¾	.11¾
November	.10¾	.10½	.12	.12
December	.10½	.10	.12	.12
Year	.14	.10	.12	.09¾

Corn Oil, Crude

(F.o.b. mill)

(In tank cars)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.10	$0.09¼	$0.07	$0.06¼
February	.09⅞	.09⅝	.08½	.07⅝
March	.10¾	.10	.08½	.08
April	.10¼	.10	.07⅞	.07½
May	.13	.11	.07½	.07⅛
June	.13¼	.12⅛	.08⅛	.08¼
July	.12⅜	.12	.08½	.08¼
August	.12	.09	.09	.08¼
September	.10¼	.08¾	.10	.09
October	.08½	.07¾	.09¼	.09⅛
November	.08	.06½	.09¼	.09¼
December	.06½	.06¼	.09¼	.09
Year	.13¼	.06¼	.10	.06¼

Corn Oil, Refined

August 5, 1895, the price was $32 to $33; October 18, 1913, $6.25 to $6.35; 1919, August, $28.56.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12½	$0.12½	$0.11	$0.11
February	.13	.13	.11	.11
March	.13	.13	.11	.11
April	.13	.13	.11	.11
May	.15	.13	.11	.11
June	.16	.15	.12	.12
July	.16	.16	.12	.12
August	.16	.14½	.12	.12
September	.14½	.13½	.12	.12
October	.13	.12	.12	.12
November	.11⅞	.11⅞	.12½	.12½
December	.11⅞	.11	.12	.12
Year	.16	.11	.12½	.11

Cottonseed Oil, Prime Crude *(F.o.b. Southeast)*

October 18, 1871, the price was 44c. to 46c. per gallon; 1881, 45c. to 50c.; 1891, 30c. to 31c.; 1901, 30c. to 31c.; 1911, 33c.; 1913, 43c. to 43½c. per gallon; 1919, June, 22.50c. per pound.

(Tank cars)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.10	$0.09½	$0.0700	$0.0675
February	.10¼	.09½	.0850	.0775
March	.11¼	.10⅝	.0800	.0750
April	11.50	10.50	.0750	.07125
May	12.50	11.75	.07875	.0725
June	14.00	14.00	.0800	.0800
July	Nominal		Nominal	
August	14.00	.1050	.0900	.0775
September	.08621½	.07871½	.1000	.0875
October	.0800	.0725	.1000	.0900
November	.0725	.0650	.0925	.08875
December	.0650	.0625	.08871½	.0850
Year	14.00	.0625	.1000	.0675

Cottonseed Oil, Prime Summer Yellow

October 18, 1871, the price was 53c. to 56c. per gallon; in 1881, 56c. to 57½c. per gallon; 1891, 34c. to 35c. per gallon; 1901, 38c. to 40c. per gallon; 1911, 6c. to 6.12½c. per pound; 1913, 6.85c. to 6.90c.; 1919, July, 27.50c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Cents per pound)			
January	11.75	10.90	.0860	.0835
February	11.62	10.85	.0975	.0875
March	12.20	11.50	.0950	.0930
April	12.85	11.75	.0900	.0850
May	15.50	12.00	.0918	.0875
June	15.90	14.80	.0925	.0910
July	15.50	14.60	.0985	.0900
August	14.00	12.25	.1000	.0940
September	13.25	.0900	.1150	.1025
October	.0940	.0725	.1115	.1045
November	.0850	.0800	.1070	.1010
December	.0815	.0800	.1035	.0990
Year	15.90	.0725	.1150	.0835

Flaxseed

Highest and lowest prices of cash flaxseed at Minneapolis monthly in the past two years were as follows:—

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per bushel)			
January	$2.58½	$2.52	$2.31⅜	$2.20¼
February	2.50	2.37	2.32⅞	2.29⅜
March	2.42½	2.20¼	2.30¼	2.21½
April	2.39¾	2.31½	2.30¼	2.22
May	2.39	2.28¾	2.38¾	2.27
June	2.39½	2.23	2.29¾	2.21
July	2.53¼	2.30¼	2.27½	2.19¼
August	2.54½	2.44½	2.35	2.25
September	2.39¼	2.29	2.27	2.18¼
October	2.31¼	2.18	2.19¾	2.06
November	2.32	2.23½	2.18¾	2.05¼
Year	2.58½	2.18	2.38¾	2.05¼
December	2.30	2.23¼	2.15¾	2.12¼

Linseed Oil

October 18, 1871, the price was 81c. to 82c.; 1881, 50c. to 60c.; 1891, 40c.; 1901, 65c. to 66c.; 1911, 88c. to 89c.; 1913, 46c.; 1919, July, $2.22.

(Car lots)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1210	$0.1150	$0.1070	$0.1020
February	.1130	.1130	.1040	.1030
March	.1120	.1070	.1080	.1030
April	.1110	.1060	.1080	.1030
May	.1090	.1060	.1120	.1090
June	.1070	.1040	.1150	.1120
July	.1220	.1140	.1090	.1050
August	.1230	.1110	.1120	.1100
September	.1130	.1110	.1040	.1030
October	.1080	.1060	.1010	.0960
November	.1170	.1100	.1000	.0960
December	.1100	.1020	.0960	.0940
Year	.1230	.1020	.1150	.0940

Olive Oil, Edible

January 19, 1918, the price was $3 to $3.25; 1918, November, $7.50.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per gallon)			
January	$2.00	$2.00	$2.00	$2.00
February	2.00	2.00	2.20	2.00
March	2.00	2.00	2.20	2.20
April	2.00	2.00	2.20	2.20
May	2.00	2.00	2.50	2.20
June	2.00	2.00	2.50	2.40
July	2.00	2.00	2.50	2.50
August	2.00	2.00	2.50	2.50
September	2.00	2.00	2.30	2.50
October	2.00	2.00	2.50	2.50
November	2.00	2.00	2.50	2.50
December	2.00	2.00	2.50	2.50
Year	2.00	2.00	2.50	2.00

Olive Oil, Prime Foots

May 13, 1879, the price was 8½c.; October 18, 1881, 7½c.; 1891, 5¼c. to 5½c.; 1901, 5c. to 5¼c.; 1911, 7¼c. to 7½c.; 1913, 7¾c. to 8c.; 1918, May, 45c.

(In casks)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.08¾	$0.08¾	$0.09⅝	$0.09½
February	.08¾	.08½	.09¾	.08⅝
March	.08⅝	.08½	.10	.09¼
April	.08⅝	.08½	.09½	.09⅜
May	.08⅝	.08½	.09½	.09½
June	.08½	.08½	.09⅝	.09
July	.08½	.08½	.09⅞	.08⅝
August	.08½	.08½	.09½	.08⅝
September	.08¾	.08½	.10½	.10¼
October	.08⅞	.08¾	.10	.09⅞
November	.09½	.08⅝	.10	.09⅞
December	.09½	.08⅝	.09⅞	.09½
Year	.09½	.08½	.10½	.08⅝

Olive Oil, Denatured

October 18, 1871, the prise was $1.22 to $1.25; 1881, $1 to $1.10; 1891, 62c. to 65c.; 1901, 58c. to 62c.; 1911, 85c. to 89c.; 1913, 83c. to 85c.; 1919, January, $3.50.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per gallon)			
January	$1.22	$1.22	$1.35	$1.35
February	1.22	1.20	1.80	1.35
March	1.20	1.20	1.75	1.65
April	1.20	1.20	1.65	1.65
May	1.20	1.10	1.70	1.65
June	1.20	1.18	1.80	1.70
July	1.20	1.20	1.80	1.80
August	1.20	1.15	1.70	1.70
September	1.25	1.25	1.75	1.70
October	1.40	1.35	1.75	1.75
November	1.50	1.38	1.70	1.60
December	1.38	1.35	1.60	1.40
Year	1.50	1.10	1.80	1.35

Palm Oil, Lagos

October 18, 1871, the price was 8c. to 8¾c.; 1881, 7¼c. to 7¾c.; 1891, 6c. to 6½c.; 1901, 5½c. to 5¾c.; 1911, nominal; 1913, 7⅝c. to 7¾c.; 1918, May, 40c.

(In casks)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.09⅛	$0.08⅞	$0.08½	$0.08¼
February	.08¾	.08⅝	.08⅝	.08½
March	.08¾	.08⅝	.08¾	.08¼
April	.08⅝	.08½	.08½	.08¼
May	.09	.08⅝	.08¼	.08¼
June	.09	.08¾	.08½	.07¾
July	.08½	.08⅜	.07½	.07½
August	.08¾	.08½	.07¾	.07½
September	.08⅞	.08½	.07⅞	.07½
October	.08⅝	.08½	.07⅞	.07⅝
November	.08¼	.08¼	.07⅞	.07⅝
December	.08¼	.08¼	.07⅝	.07⅝
Year	.09⅛	.08⅛	.08¾	.07⅛

Palm Kernel Oil

February 26, 1910, the price was 8⅝c. to 8½c.; October 18, 1911, 9¼c.; 1913, 10½c. to 10¾c.; October, 1919, 22c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.10½	$0.10¼	$0.09	$0.09
February	.10¼	.09⅞	.09¼	.09
March	.09⅞	.09¾	.09¼	.09¼
April	.09¾	.09⅝	.09¼	.08⅞
May	.10	.09⅝	.09	.08⅞
June	.10⅝	.10¼	.09	.08⅞
July	.10¼	.10¼	.09	.08⅞
August	.10¼	.10	.09¼	.09
September	.10¼	.10¼	.09¼	.09
October	.10	.09¾	.09¼	.09
November	.10	.09½	.09¼	.09¼
December	.09¼	.09	.09¼	.09¼
Year	.10⅝	.09	.09¼	.08⅞

Peanut Oil, Crude *(F.o.b. Mills)*

November 13, 1909, the price was 8c.; October 18, 1911, 7c. to 7¼c.; 1913, 6½c. to 7½c.; 1919, November, $1.80.

(In buyers' tanks)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.12	$0.12	$0.09	$0.08¼
February	.12¼	.12	.08½	.08½
March	.12½	.12¼	.11	.11
April	.11¼	.10⅞	.12½	.12½
May	.13	.12½	.12½	.12½
June	.13	.13	.12½	.12½
July	.13	.13	.12½	.12½
August	.13	.13	.12½	.12½
September	.13	.13	.12½	.12½
October	.13	.13	.12	.10½
November	.11	.09½	.10½	.10½
December	.11	.11	.10	.09½
Year	.13	.09½	.12½	.08½

Peanut Oil, Domestic, Refined

August 5, 1916, the price was 12½c. to 14c.; 1919, January, 21c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.15	$0.15	$0.14½	$0.14½
February	.16	.15	.14½	.14½
March	.16	.16	.14½	.14½
April	.16	.16	.14½	.14½
May	.16	.16	.14½	.14½
June	.16	.16	.14½	.14½
July	.16	.16	.14½	.14½
August	.16	.16	.14½	.14½
September	.16	.16	.14½	.14½
October	.16	.16	.14½	.14½
November	.16	.15	.14½	.14½
December	.15	.14½	.13½	.13½
Year	.16	.14½	.14½	.13½

Peanut Oil, Oriental *(Pacific Coast, in Bond)*

May 20, 1918, the price was 18½c.; 1919, August, 26½c.

(In sellers' tanks)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.09½	$0.09½	$0.13	$0.13
February	.09½	.09	.13	.13
March	.09	.09	.13	.13
April	.09	.09	.13	.13
May	.09	.09	.13	.13
June	.11	.11	.13	.13
July	.11	.11	.13	.13
August	.13	.11	.13	.13
September	.13	.13	.13	.13
October	.13	.13	.13	.13
November	.13	.13	.13	.13
December	.13	.13	.12¾	.12¾
Year	.13	.09	.13	.12¾

Perilla Oil

August 5, 1918, the price was 19c.; 1919, August, 20c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.15¼	$0.15¼	$0.13	$0.13
February	.15¼	.15¼	.13	.12½
March	.15¼	.13⅞	.13¾	.13¼
April	.13⅞	.13½	.14⅛	.13⅝
May	.13½	.13⅛	.16½	.16½
June	.13	.13	.16⅛	.16½
July	.13	.13	.16½	.16½
August	.13	.13	.16½	.15
September	.13	.12¾	.15	.15
October	.13	.12	.15	.14½
November	.13¼	.13¼	.14½	.14¼
December	.13¼	.13	.14¼	.14¼
Year	.15¼	.12	.16½	.12½

Rapeseed Oil, Blown

May 12, 1902, the price was 67c. to 68c.; October 18, 1901, 68½c. to 67c.; 1911, 72c. to 73c.; 1913, 67c. to 68c.; 1918, September, $2.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per gallon)			
January	$1.10	$1.10	$0.95	$0.95
February	1.10	1.05	.95	.90
March	1.05	1.00	.90	.90
April	1.00	1.00	.90	.90
May	1.00	1.00	1.02	.90
June	1.05	1.05	1.02	1.02
July	1.05	1.05	1.02	1.02
August	1.05	1.05	1.02	1.02
September	1.05	1.05	1.03	1.02
October	1.05	1.00	1.03	1.03
November	1.00	.95	1.03	1.03
December	.95	.95	1.01	1.01
Year	1.10	.95	1.03	.90

Rapeseed Oil, Refined

October 18, 1871, the price was $1.15 to $1.30; 1881, 85c. to $1; 1891, 67½c. to 70c.; 1901, 68c. to 72c.; 1911, 69c. to 72c.; 1913, 63c. to 64c.; 1918, October, $1.92.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per gallon)			
January	$0.93	$0.92	$0.79	$0.78
February	.93	.86	.76	.75
March	.85	.84	.82	.81
April	.84	.84	.82	.82
May	.85	.84	.82	.80
June	.88	.86	.80	.79
July	.88	.88	.79	.78
August	.89	.84	.82	.79
September	.85	.84	.85	.82
October	.85	.82	.85	.83
November	.82	.77	.82	.81
December	.79	.77	.81	.79
Year	.93	.77	.85	.75

Sesame Oil, Refined

December 7, 1873, the price was $1.15 to $1.20; October 18, 1881, $1 to $1.10; 1891, 72c. to 75c.; 1901, 67c. to 70c.; 1911, 75c. to 85c.; 1918, November, $4.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.13½	$0.13	$0.13	$0.13
February	.13½	.13½	.13	.13
March	.13½	.13½	.13	.13
April	.13½	.13	.13	.13
May	.13	.13	.14	.13
June	.14½	.14½	.14	.13
July	.14½	.14½	.13	.13
August	.14½	.14½	.13	.13
September	.14½	.14½	.13	.13
October	.14½	.13½	.13	.13
November	.13½	.13	.13	.13
December	.13	.13	.13	.13
Year	.14½	.13	.14	.13

Soya Bean Oil, Crude

December 18, 1909, the price was 6½c. to 6¾c.; October 18, 1911, 7½c. to 7¾c.; 1913, 6¾c. to 6½c.; 1918, July, 20½c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.13¼	$0.13¼	$0.12	$0.11¾
February	.13¼	.13¼	.12	.12
March	.13¼	.13¼	.12	.12
April	.13¼	.13¼	.12¼	.12
May	.13¼	.13¼	.12½	.12¼
June	.14	.13½	.12¼	.12
July	.14	.14	.12	.12
August	.14	.14	.12	.12
September	.14	.14	.12	.12
October	.14	.14	.12	.12
November	.13	.12	.12	.12
December	.12	.11¾	.12	.12
Year	.14	.11¾	.12½	.11¾

Tallow, Vegetable *(C.i.f. Pacific Coast)*

December 9, 1918, the price was 16c.; 1919, June, 22c.

(In mats)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.10¼	$0.10¼	$0.07¾	$0.07¾
February	.11	.11	.07¾	.07¾
March	.11	.10	.07¾	.07¾
April	.11	.11	.07¾	.07½
May	.11	.11	.07½	.07¼
June	.11	.11	.07½	.07½
July	.11	.11	.07½	.07¼
August	.11	.11	.07½	.07¼
September	.08¾	.08¾	.08⅛	.08⅛
October	.08¾	.08¾	.08⅛	.08
November	.09	.08⅝	.08	.08
December	.09	.07¾	.08	.08
Year	.11	.07¾	.08⅛	.07¼

Tea Oil *(F.o.b. Pacific Coast)*

August 5, 1918, the price was 24c. to 25c.; 1918, September $3.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
	(Per pound)			
January	$0.17½	$0.17½	$0.14¼	$0.14¼
February	.17½	.17	.14¾	.14¾
March	.15½	.15½	.14¾	.14¾
April	.18½	.15¾	.15½	.14¾
May	.18¾	.18¾	.15½	.15¼
June	.18¾	.18¾	.15¼	.15¼
July	.18	.18	.15¼	.15¼
August	.18	.18	.15¼	.15¼
September	.16	.15	.15¼	.15¼
October	.16	.15¾	.15¼	.15¼
November	.15¾	.14¾	.15¼	.15¼
December	.14¾	.14¾	.15¼	.15¼
Year	.18¾	.14¾	.15½	.14¼

Greases, Lard, Stearins and Tallow

Grease, White

March 4, 1907, the price was 5½c. to 5¾c.; October 18, 1911, 5¼c. to 5¾c.; 1913, 4¼c. to 5¼c.; 1918, June, 16½c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.09½	$0.09¼	$0.07½	$0.07⅜
February	.09¼	.09	.07½	.07½
March	.09¾	.09	.07½	.07½
April	.08¾	.08½	.07½	.07
May	.08½	.08½	.07¾	.07
June	.08¾	.08¾	.07¾	.07⅜
July	.08½	.08¾	.07⅜	.07⅜
August	.08½	.08½	.07⅜	.07⅜
September	.08½	.08½	.07½	.07⅜
October	.08¼	.07½	.08¼	.07⅜
November	.07¼	.06½	.08	.07¼
December	.07	.06½	.08	.07¼
Year	.09½	.06½	.08¼	.07

Grease, House

November 16, 1901, the price was 5¼c. to 5½c.; October 18, 1911, 5¾c. to 6¼c.; 1913, 5¼c. to 5¾c.; 1919, July, 16½c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.08⅞	$0.08⅝	$0.06½	$0.06¼
February	.08½	.08¾	.06¾	.06⅝
March	.08⅝	.08	.06¾	.06¼
April	.08	.07¾	.06¾	.06⅜
May	.07⅞	.07¾	.06¾	.06⅜
June	.08½	.07⅞	.06⅝	.06⅜
July	.08¼	.07¾	.06¾	.06⅝
August	.08⅛	.07⅞	.06⅝	.06⅜
September	.08	.07¾	.07¼	.06¾
October	.07⅝	.07	.07¾	.07⅜
November	.06¾	.06	.07¾	.07⅜
December	.06¼	.06	.07⅝	.07¼
Year	.08¾	.06	.07¾	.06⅝

Lard, City

February 18, 1874, the price was 9¾c. per pound; October 18, 1881, 12c.; 1891, 6.30c. to 6.50c.; 1901, 9.20c. to 9.30c.; 1911, 8¾c.; 1913, 10½c.; 1919, June, 35½c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$15.50	$15.25	$12.75	$12.50
February	15.37½	14.75	12.75	12.75
March	15.00	14.75	12.75	12.75
April	14.50	14.25	12.75	12.50
May	16.25	14.75	12.75	12.50
June	17.25	16.75	12.75	12.50
July	16.50	16.00	12.75	12.50
August	16.00	15.00	12.50	12.25
September	15.50	14.50	13.25	12.50
October	15.00	14.00	12.75	12.35
November	14.00	12.25	12.50	12.25
December	13.00	12.25	12.25	11.75
Year	17.25	12.25	13.26	11.75

Lard, Compound

February 8, 1897, the price was 4c. to 4¾c. per pound; October 18, 1901, 8c. to 8½c.; 1911, 7½c. to 7¾c.; 1913, 8¾c. to 8¾c.; 1919, July, 30c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$13.25	$12.25	$10.00	$10.00
February	13.25	13.25	11.50	10.00
March	14.00	13.50	11.50	11.00
April	14.25	14.00	11.00	11.00
May	16.00	14.75	11.25	11.00
June	17.25	16.75	11.25	11.25
July	17.25	16.25	11.75	11.25
August	16.25	14.25	12.25	11.75
September	14.50	13.75	13.75	12.75
October	12.75	11.75	13.75	13.75
November	11.00	10.00	13.25	13.25
December	10.25	10.00	13.00	12.75
Year	17.25	10.00	13.75	10.00

Lard, Middle Western

April 29, 1907, the price was 9.10c. per pound; October 18, 1911, 9.40; 1913, 10⅝c. to 10⅞c.; 1919, June, 36½c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$15.85	$15.50	$13.00	$12.80
February	15.65	15.05	13.00	12.80
March	15.25	14.80	12.95	12.85
April	14.75	14.25	12.85	12.65
May	16.30	15.10	12.90	12.65
June	17.40	16.90	13.25	12.95
July	16.75	16.10	13.15	12.85
August	16.25	15.40	12.90	12.50
September	15.60	14.70	13.60	12.90
October	15.10	14.10	13.15	12.30
November	14.10	12.30	12.70	12.55
December	13.35	12.40	12.25	12.00
Year	17.40	12.30	13.60	12.00

Lard, Neutral

February 8, 1897, the price was 5c. to 5⅜c.; per pound; October 18, 1901, 12¼c. to 12½c.; 1911, 10⅞c.; 1913, 11¾c. to 12c.; 1919, June, 37½c.

(In tierces)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$18.00	$18.00	$15.75	$15.50
February	18.00	17.25	15.75	15.75
March	17.00	16.25	15.25	15.00
April	16.00	15.50	15.00	14.00
May	17.75	15.50	14.00	13.75
June	19.00	18.25	13.75	13.75
July	18.50	17.75	13.50	13.50
August	17.75	17.00	13.50	13.50
September	17.00	17.00	13.50	13.50
October	17.50	16.50	13.50	13.00
November	17.00	16.25	15.00	13.00
December	16.25	15.50	15.00	14.75
Year	19.00	15.50	15.75	13.00

Tallow, Edible

December 22, 1906, the price was 7¼c.; October 18, 1911, 7¾c. to 8c.; 1913, 8c. to 8½c.; 1919, July, 27c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11¼	$0.11	$0.08½	$0.08¼
February	.11	.10¼	.08½	.08½
March	.10⅝	.09⅞	.08⅝	.08½
April	.09⅞	.09¼	.08⅝	.08⅜
May	.10	.09¼	.08½	.08
June	.10⅜	.10¼	.08¼	.08¼
July	.10½	.10¼	.08¼	.08¼
August	.10¼	.09⅞	.08½	.08¼
September	.10⅜	.10	.09½	.08½
October	.09½	.09	.10	.08⅜
November	.08⅜	.08½	.10	.09¼
December	.08½	.08	.10⅜	.09¼
Year	.11¼	.08	.10⅜	.08

Tallow, Special, Loose

August 26, 1911, the price was 7c. to 7¼c.; October 18, 1911, 7¼c. to 7⅜c.; 1913, 6⅞c.; 1919, July, 21c.

(In car lots)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.09⅝	$0.09⅝	$0.07½	$0.07⅛
February	.09½	.09⅛	.07⅝	.07⅝
March	.09⅛	.08⅞	.07¾	.07½
April	.08¾	.07⅞	.07½	.07⅝
May	.08⅞	.07⅞	.07⅝	.07⅝
June	.09¼	.08¾	.07⅝	.07½
July	.08½	.08¼	.07½	.07½
August	.08⅝	.08⅜	.07¾	.07½
September	.08½	.08⅛	.08¼	.08
October	.08	.07¾	.09	.08
November	.07½	.07	.08⅞	.08¼
December	.07¾	.06⅞	.08⅝	.08¼
Year	.09⅝	.06⅞	.09	.07⅛

Stearin, Lard

November 23, 1896, the price was 5c. to 5¼c.; October 18, 1901, 10½c. to 10¾c.; 1911, 10½c. to 11c.; 1913, 12c. to 12¼c.; 1919, July, 41c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.18¼	$0.17¾	$0.16	$0.16
February	.18	.17½	.16	.16
March	.17¾	.17½	.16	.15½
April	.17½	.17	.15½	.15
May	.18	.17½	.15	.15
June	.20	.19¼	.15	.15
July	.19½	.17¾	.15	.15
August	.17¾	.17¾	.15	.15
September	.17¾	.17¾	.15	.15
October	.17¼	.17	.15	.15
November	.17	.16½	.15	.15
December	.16½	.16	.15	.15
Year	.20	.16	.16	.15

Stearin, Oleo

January 4, 1891, the price was 6¼c. to 6½c.; October 18, 1901, 11½c. to 11¾c.; 1911, 10¼c.; 1913, 8½c. to 8¾c.; 1919, July, 41c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.13	$0.12¼	$0.09¾	$0.09
February	.12½	.11¼	.10¼	.09¾
March	.12¾	.12¼	.10⅞	.10¼
April	.11½	.11	.09½	.09¾
May	.15	.12	.10¼	.09¼
June	.16	.13½	.09⅞	.09½
July	.14¾	.12¾	.10⅜	.09½
August	.12½	.11	.10⅝	.10⅜
September	.13	.12¼	.12⅞	.11⅝
October	.12½	.11½	.13¼	.12⅜
November	.11	.09⅜	.12¼	.11¼
December	.10	.09⅝	.10¼	.09⅞
Year	.16	.09⅝	.13¼	.09

Animal Oils

Degras, American

November 28, 1903, the price was 2½c. to 2¾c.; October 18, 1911, 2¼c.; 1913, 3c.; 1918, October, 20½c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.04¾	$0.04¾	$0.04¾	$0.04¾
February	.04¾	.04¾	.04¾	.04¾
March	.04¾	.04¾	.04¾	.04¾
April	.04¾	.04¾	.04¾	.04¾
May	.04¾	.04½	.04¾	.04¾
June	.04¾	.04¾	.04¾	.04¾
July	.04¾	.04¾	.04¾	.04¾
August	.04¾	.04¾	.04¾	.04¾
September	.04¾	.04¾	.04¾	.04½
October	.04¾	.04¾	.04½	.04½
November	.04¾	.04¾	.04½	.04½
December	.04¾	.04¾	.04½	.04½
Year	.04¾	.04¾	.04¾	.04½

Degras, English

January 20, 1875, the price was 7½c. to 8c.; October 18, 1881, 9½c. to 10c.; 1891, 3¼c. to 3½c.; 1901, 3½c. to 3⅝c.; 1911, 2½c.; 1913, 3⅛c. to 3¼c.; 1918, October, 28c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05¼	$0.05¼	$0.05⅝	$0.05⅝
February	.05¼	.05¼	.05⅝	.05⅝
March	.05¼	.05¼	.05⅝	.05⅝
April	.05⅝	.05¼	.05⅝	.05⅝
May	.05⅝	.05⅝	.05⅝	.05⅝
June	.05⅝	.05⅝	.05⅝	.05⅝
July	.05½	.05½	.05⅝	.05⅝
August	.05½	.05½	.05⅝	.05⅝
September	.05½	.05½	.05⅝	.05⅝
October	.05½	.05½	.05⅝	.05⅝
November	.05½	.05½	.05⅝	.05⅝
December	.05½	.05⅝	.05⅝	.05⅝
Year	.05½	.05¼	.05⅝	.05⅝

Horse Grease

March 24, 1875, the price was 80c. to 85c.; the next quotation was November 29, 1913, 6½c. to 7¼c.; 1918, February, 19c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.10	$0.10	$0.09	$0.09
February	.10	.10	.09	.09
March	.10	.10	.09	.09
April	.10	.09½	.09	.09
May	.09½	.09½	.09	.09
June	.09½	.09½	.09	.09
July	.09½	.09½	.09¼	.09¼
August	.09½	.09½	.09¼	.09¼
September	.09½	.09½	.09½	.09¼
October	.09½	.09	.09½	.09½
November	.09	.09	.09½	.09½
December	.09	.09	.09½	.09½
Year	.10	.09	.09½	.09

Lard Oil, Extra No. 1

February 15, 1876, the price was 95c. to $1; October 18, 1881, 85c. to 90c.; 1891, 47c. to 50c.; 1901, 52c. to 54c.; 1911, 60c. to 64c.; 1913, 58c. to 59c.; 1918, October, $1.70.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$13.50	$13.25	$10.75	$10.50
February	13.75	13.25	11.25	10.75
March	13.50	13.00	11.25	11.25
April	12.75	12.25	11.25	11.00
May	12.50	12.25	11.50	11.00
June	12.75	12.75	11.50	11.50
July	12.75	12.50	11.50	11.25
August	12.50	11.75	11.25	11.25
September	11.75	11.75	11.50	11.50
October	11.75	11.50	13.25	12.25
November	11.25	10.75	13.00	12.75
December	10.75	10.50	12.75	12.25
Year	13.75	10.50	13.25	10.50

Lard Oil, No. 2

October 18, 1871, the price was 65c. to 68c.; 1881, 55c. to 62½c.; 1891, 35c. to 37c.; 1901, 41c. to 42c.; 1911, 56c. to 60c.; 1913, 52c. to 53c.; 1918, September, $1.50.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$12.75	$12.75	$10.00	$10.00
February	13.00	12.75	10.50	10.00
March	12.75	12.50	10.50	10.50
April	12.25	11.75	10.25	10.25
May	12.00	11.75	10.25	10.25
June	12.25	12.00	10.25	10.25
July	12.00	11.75	10.25	10.12½
August	11.75	11.25	10.25	10.25
September	11.25	11.25	10.50	10.50
October	11.25	11.00	10.75	10.50
November	10.75	10.25	11.00	11.00
December	10.25	10.00	11.00	11.00
Year	13.00	10.00	11.00	10.00

Neatsfoot Oil, Pure

October 18, 1871, the price was $1 to $1.10; 1881, 80c. to 90c.; 1891, 60c. to 70c.; 1901, 52c. to 53c.; 1911, 75c. to 80c.; 1913, 64c. to 65c.; 1918, October, $2.50.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$16.50	$15.75	$13.00	$12.75
February	17.75	16.75	12.75	12.75
March	17.75	17.00	12.75	12.75
April	16.75	16.50	12.75	12.75
May	16.50	16.50	13.25	12.75
June	16.50	16.25	13.75	13.25
July	16.50	16.25	14.75	13.75
August	16.25	15.75	14.75	14.75
September	16.00	15.75	15.25	15.25
October	15.75	15.50	16.75	15.50
November	15.50	14.25	16.75	16.75
December	14.00	13.50	16.75	16.50
Year	17.75	13.50	16.75	12.75

Oleo Oil, No. 1

April 24, 1909, the price was 9c. to 14½c.; October 18, 1911, 9¼c. to 11½c.; 1913, 9c. to 12½c.; 1919, June, 35c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$13.50	$13.25	$11.00	$10.00
February	13.00	12.25	12.25	10.75
March	13.00	12.75	12.25	12.00
April	13.00	12.50	11.75	11.25
May	13.75	13.00	14.00	12.00
June	14.75	14.25	14.25	13.50
July	14.75	14.00	14.25	13.75
August	13.25	12.00	13.75	13.25
September	12.50	12.00	15.75	15.00
October	12.00	11.50	18.75	16.00
November	11.50	10.87½	18.50	18.00
December	10.75	10.25	18.00	17.50
Year	14.75	10.25	18.75	10.00

Oleo Oil, No. 2

July 29, 1918, the price was 26c.; 1919, June, 33c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$12.50	$12.00	$10.00	$9.25
February	11.75	11.25	11.25	9.75
March	12.25	12.25	11.25	11.00
April	12.25	12.00	11.00	10.00
May	13.00	12.50	13.00	11.00
June	14.25	13.75	12.75	12.25
July	12.50	12.00	13.00	12.50
August	12.00	11.25	12.50	11.25
September	11.75	11.00	14.75	12.50
October	11.25	10.50	17.50	14.75
November	10.75	10.00	17.00	16.25
December	9.75	9.25	16.25	16.25
Year	14.25	9.25	17.50	9.25

Tallow Oil, Acidless

October 18, 1871, the price was 77½c. to 80c.; 1881, 75c. to 85c.; 1891, 45c. to 48c.; 1901, 57c.; 1911, 63c. to 65c.; 1913, 62c. to 63c.; 1919, July, $1.90.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$13.00	$13.00	$10.25	$10.25
February	12.75	12.75	11.25	10.25
March	12.75	12.50	11.50	10.75
April	12.50	11.75	10.75	10.50
May	12.00	11.75	10.75	10.50
June	12.25	12.00	10.75	10.75
July	12.00	11.75	10.75	10.50
August	11.75	11.50	10.50	10.50
September	11.00	11.50	11.00	10.50
October	11.50	11.00	11.50	11.25
November	10.75	10.75	12.25	12.25
December	10.25	10.25	12.00	11.75
Year	13.00	10.25	12.25	10.25

Fatty Acids

Red Oil, Distilled

May 27, 1911, the price was 6½c. to 7½c.; October 18, 1913, 6c. to 6¼c.; 1919, June, 20½c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11	$0.10¾	$0.09½	$0.09½
February	.10¾	.10¾	.09½	.09½
March	.11¼	.10½	.09½	.09½
April	.10½	.10½	.09½	.09¼
May	.10	.09¾	.09½	.09½
June	.09¾	.09¾	.09½	.09½
July	.09¾	.09¾	.09½	.09½
August	.09¾	.09¾	.09½	.09½
September	.09¾	.09¾	.09¾	.09½
October	.09¾	.09¾	.09¾	.09¾
November	.09¾	.09½	.09¾	.09¾
December	.09½	.09½	.09¾	.09¾
Year	.11¼	.09½	.09¾	.09½

Red Oil, Saponified

October 18, 1871, the price was 55c. to 57c.; 1881, 60c.; 1891, 5c. to 5¼c.; 1901, 6¼c. to 6½c.; 1911, 7c. to 7½c.; 1913, 6½c. to 7c.; 1919, July, 20½c.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.11¼	$0.11¼	$0.09¾	$0.09¾
February	.11¼	.11¼	.09¾	.09¾
March	.11¼	.11¼	.09¾	.09¾
April	.11	.10½	.09¾	.09¾
May	.10	.10½	.09¾	.09¾
June	.11	.11	.09¾	.09¾
July	.11	.11	.09¾	.09¾
August	.11	.10	.09¾	.09¾
September	.10	.10	.10	.09¾
October	.10	.10	.10	.10
November	.10	.09¾	.10	.10
December	.09¾	.09¾	.10	.10
Year	.11¼	.09¾	.10	.09¾

Stearic Acid, Double Pressed

May 16, 1908, the price was 10c. to 10¼c.; October 18, 1911, 10¼c. to 10½c.; 1919, July, 31½c.

(In bags)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.15¾	$0.15¾	$0.12	$0.12
February	.15¾	.15¾	.12	.12
March	.15¾	.15½	.11½	.11½
April	.14¼	.13¾	.11½	.11½
May	.13¾	.13	.11½	.11½
June	.13	.13	.11½	.11½
July	.13	.13	.11½	.11½
August	.13	.12½	.11½	.11
September	.13	.13	.11½	.11
October	.13	.13	.11¾	.11¾
November	.12¾	.12	.11¾	.11¾
December	.12	.12	.11¾	.11¾
Year	.15¾	.12	.12	.11

Stearic Acid, Triple Pressed

June 12, 1915, the price was 13c. to 13½c.; 1919, July, 34c.

(In bags)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.18	$0.18	$0.14	$0.14
February	.18	.18	.14	.14
March	.18	.17¾	.13½	.13½
April	.17	.16½	.13½	.13½
May	.16¼	.15	.13½	.13½
June	.15	.15	.13½	.13½
July	.15	.15	.13½	.13½
August	.15	.15	.13½	.13
September	.15	.15	.13½	.13
October	.15	.15	.13¾	.13¾
November	.14¾	.14	.13¾	.13¾
December	.14	.14	.13¾	.13¾
Year	.18	.14	.14	.13

Fish Oils

Cod Oil, Newfoundland

October 18, 1871, the price was 67½c. to 70c.; 1881, 42¼c. to 47c.; 1891, 42c. to 43c.; 1901, 34c. to 35c.; 1911, 54c. to 57c.; 1913, 40c. to 42c.; 1918, October, $1.60.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.65	$0.65	$0.63	$0.63
February	.65	.65	.63	.63
March	.65	.65	.63	.63
April	.60	.60	.63	.63
May	.60	.60	.63	.63
June	.60	.60	.63	.63
July	.60	.60	.63	.63
August	.60	.60	.63	.63
September	.65	.60	.63	.63
October	.65	.62	.63	.63
November	.62	.62	.63	.63
December	.63	.60	.63	.63
Year	.65	.60	.63	.63

Herring Oil *(F.o.b. Pacific Coast)*

October 31, 1888, the price was 35c.; October 18, 1901, nominal; 1911, 50c.; 1913, nominal; 1918, October, $1.20.

(In sellers' tanks)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.50	$0.50	$0.42	$0.42
February	.50	.50	.42	.42
March	.50	.50	.42	.42
April	.50	.47	.42	.42
May	.47	.47	.42	.42
June	.47	.47	.42½	.42
July	.47	.47	.42½	.42½
August	.47	.47	.42½	.42½
September	.47	.45	.42½	.42½
October	.45	.45	.42½	.40
November	.45	.42	.40	.40
December	.42	.42	.40	.40
Year	.50	.42	.42½	.40

Menhaden Oil, Southern, Crude *(F.o.b. Baltimore)*

December 1, 1886, the price was 18c. to 19c.; October 18, 1901, 25c.; 1911, 35c.; 1913, 35c.; 1918, September, $1.27.

(In tank cars)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.52½	$0.52½	$0.40	$0.40
February	.52½	.52¾	.47½	.40
March	.52½	.52½	.47½	.47½
April	Nominal		.47½	.47½
May	Nominal		.47½	.47½
June	.47½	.47½	.47½	.47½
July	.47½	.47½	.47½	.44
August	.47½	.47½	.43½	.42
September	.47½	.45	.46	.43½
October	.45	.45	.45	.44
November	.45	.45	.44	.44
December	.45	.40	.44	.40
Year	.52½	.40	.47½	.40

Menhaden Oil, Light Pressed

October 18, 1871, the price was 41c.; 1881, nominal; 1891, nominal; 1901, 34c. to 35c.; 1911, 50c. to 54c.; 1913, 42c. to 44c.; 1918, November, $1.50.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.70	$0.70	$0.58	$0.58
February	.70	.70	.60	.58
March	.70	.65	.60	.60
April	.70	.65	.60	.60
May	.65	.65	.60	.60
June	.65	.65	.60	.60
July	.65	.65	.60	.60
August	.65	.65	.59	.58
September	.65	.65	.60	.59
October	.65	.58	.60	.60
November	.58	.58	.60	.60
December	.58	.58	.60	.60
Year	.70	.58	.60	.58

Menhaden Oil, Yellow Bleached

January 3, 1910, the price was 33c. to 34c.; October 18, 1911, 48c. to 51c.; 1913, 40c. to 42c.; 1918, September, $1.47.

(In barrels)

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.73	$0.73	$0.61	$0.61
February	.73	.73	.63	.61
March	.73	.68	.63	.63
April	.68	.68	.63	.63
May	.68	.68	.63	.63
June	.68	.68	.63	.63
July	.68	.68	.63	.63
August	.68	.68	.62	.61
September	.68	.68	.63	.62
October	.68	.61	.63	.63
November	.61	.61	.63	.63
December	.61	.61	.63	.63
Year	.73	.61	.63	.61

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Salmon Oil

(F.o.b. Pacific Coast)

July 29, 1918, the price was 90c.; 1918, December, $1.35.

(In sellers' tanks)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.50	$0.50	$0.42	$0.42
February	.50	.50	.42	.42
March	.50	.50	.42	.42
April	.50	.47	.42	.42
May	.47	.47	.42	.42
June	.47	.47	.45	.42
July	.47	.47	.45	.44
August	.47	.47	.44	.44
September	.47	.45	.44	.44
October	.45	.43	.44	.44
November	.43	.42	.44	.44
December	.42	.42	.44	.44
Year	.50	.42	.45	.42

Sardine Oil

(F.o.b. Pacific Coast)

July 29, 1918, the price was $1.08 to $1.10; 1918, January, $1.23.

(In sellers' tanks)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.55	$0.55	$0.42	$0.42
February	.55	.55	.42	.42
March	.51	.50	.42	.42
April	.51	.50	.42	.40
May	.50	.50	.40	.40
June	.50	.50	.45	.40
July	.48	.48	.45	.40
August	.48	.48	.45	.42½
September	.48	.48	.42½	.42½
October	.48	.45	.42½	.40
November	.45	.42	.40	.40
December	.42	.42	.40	.40
Year	.55	.42	.45	.40

Sperm Oil, Bleached

October 18, 1871, the price was $1.40 to $1.42½; 1881, $1.10 to $1.12; 1891, 77c. to 80c.; 1901, 66c. to 68c.; 1911, 74c. to 76c.; 1913, 72c. to 73c.; 1918, April, $2.25.

(In barrels)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.84	$0.84	$0.84	$0.84
February	.84	.84	.84	.84
March	.84	.84	.84	.84
April	.84	.84	.84	.84
May	.84	.84	.84	.84
June	.84	.84	.84	.84
July	.84	.84	.84	.84
August	.84	.84	.84	.84
September	.84	.84	.84	.84
October	.84	.84	.84	.84
November	.84	.84	.84	.84
December	.84	.84	.84	.84
Year	.84	.84	.84	.84

Sperm Oil, Natural

On October 18, 1871, the price was $1.35 to $1.37½; 1881, $1.05 to $1.07; 1891, 72c. to 75c.; 1901, 61c. to 63c.; 1911, 71c. to 73c.; 1913, 69c.; 1918, April, $2.25.

(In barrels)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.81	$0.81	$0.81	$0.81
February	.81	.81	.81	.81
March	.81	.81	.81	.81
April	.81	.81	.81	.81
May	.81	.81	.81	.81
June	.81	.81	.81	.81
July	.81	.81	.81	.81
August	.81	.81	.81	.81
September	.81	.81	.81	.81
October	.81	.81	.78	.78
November	.81	.81	.78	.78
December	.81	.81	.78	.78
Year	.81	.81	.81	.78

Whale Oil, Crude No. 1

(F.o.b. Pacific Coast)

October 18, 1871, the price was 56c. to 57c.; 1881, nominal; 1891, nominal; 1901, nominal; 1911, nominal; 1913, nominal; 1918, August, $1.35.

(In sellers' tanks)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.07¼	$0.07¼	$0.08	$0.08
February	.07¼	.07¼	.08	.08
March	.07¼	.07¼	.08	.08
April	.07¼	.07¼	.08	.08
May	.07¼	.07¼	.07½	.07½
June	.08	.08	.07½	.07½
July	.08	.08	.07½	.07¼
August	.08	.08	.07¼	.07¼
September	.08	.08	.07¼	.07¼
October	.08	.08	.07¼	.07¼
November	.08	.08	.07¼	.07¼
December	.08	.08	.07¼	.07¼
Year	.08	.07¼	.08	.07¼

Whale Oil, Bleached Winter

October 18, 1871, the price was 65c. to 68c.; 1881, 54c.; 1891, 58c. to 59c.; 1901, 46c. to 48c.; 1911, 52c. to 54c.; 1913, 50c. to 51c.; 1918, January, $1.50.

(In barrels)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.80	$0.80	$0.80	$0.80
February	.80	.80	.80	.80
March	.80	.80	.80	.80
April	.80	.80	.80	.80
May	.80	.80	.80	.80
June	.80	.80	.80	.80
July	.80	.80	.80	.80
August	.80	.80	.80	.80
September	.80	.80	.80	.80
October	.80	.80	.80	.80
November	.80	.80	.80	.80
December	.80	.80	.80	.80
Year	.80	.80	.80	.80

Whale Oil, Natural Winter

October 18, 1871, the price was 63c.; 1881, 50c. to 51c.; 1891, 56c.; 1901, 44c. to 46c.; 1911, 50c. to 52c.; 1913, 48c. to 49c.; 1918, September, $1.50.

(In barrels)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.78	$0.78	$0.78	$0.78
February	.78	.78	.78	.78
March	.78	.78	.78	.78
April	.78	.78	.78	.78
May	.78	.78	.78	.78
June	.78	.78	.78	.78
July	.78	.78	.78	.78
August	.78	.78	.78	.78
September	.78	.78	.78	.78
October	.78	.78	.78	.78
November	.78	.78	.78	.78
December	.78	.78	.78	.78
Year	.78	.78	.78	.78

Petroleum and Its Products: Market Review

Overproduction of crude oil during practically the whole of 1927 reacted unfavorably upon the industry as a whole, and the year was a poor one from the standpoint of earnings for many of the leading oil companies, particularly those forming a complete unit, from production of crude to the ultimate marketing of refined products. While a little progress had been made toward curtailing the output of crude petroleum by the end of the year, it did not appear that the situation had been definitely corrected. With the exception of Eastern grades, crude oil quotations and selling prices of the major refinery products closed the year at the lowest levels touched during 1927, with quotations in many instances lower than for several years previous.

Conservation of the petroleum resources of the country came in for considerable discussion last year, and it is expected that 1928 will witness the unfolding of a definite program designed to avoid waste in the industry. In this connection, petroleum interests have been assured of the cooperation of responsible government agencies. Thus far, while all leading interests have agreed to the principle of conservation, unanimity in the practical details for curtailment of overproduction has not been forthcoming in all instances.

Production of crude petroleum in 1927 approximated 900,000,000 barrels, a new high record, and a heavy gain over the output of 767,000,000 barrels recorded for 1926. Total production for the United States during 1927 approximates the output of the entire world four or five years ago. While current production at the close of the year was materially under peak attained during the summer months, it could not be said that the menace of continued overproduction of crude petroleum had been removed. Production during the closing week of 1927 amounted to 2,419,750 barrels daily, as compared with peak daily output of 2,564,400 barrels, recorded during the week ended August 1. The curtailment in output has been accomplished in large measure by prorating agreements on the part of operators in the Seminole area in Oklahoma and in the West Texas fields. Seminole during the greater part of 1927 held the limelight as the heaviest producer, daily output going over the 525,000 barrel market. During the closing quarter of the year operators in the pool, by agreement, pro-rated their output, with a maximum of 450,000 barrels per day agreed upon. In the meantime, however, production in West Texas pools had picked up to the point where these fields supplanted Seminole as the newest "menace" to the industry. California throughout the entire year was in position to materially augment its daily production, but the situation on the Pacific coast was regarded with equanimity by the trade, as a few of the larger and stronger companies dominate the California field and are in position to shut in their production until more favorable conditions develop in oil markets. During the closing quarter of the year competition of Venezuelan and other Central American crude oil also became an important factor. Central American and West Texas oils are expected to figure prominently during the current year, inasmuch as the movement of this petroleum to Atlantic seaboard refiners has been showing a steady increase over the past few months.

West Texas fields were producing approximately 240,000 barrels daily at the close of 1927, of which about 200,000 barrels were being shipped and the remainder placed in storage. Potential output of the area, through test runs, has been placed at 650,000 barrels per day, but the pro-rating agreement among producers has been effective thus far in holding back development work.

A development of unusual significance in field operations during the past year was the progress made toward cooperation in development work, culminating in unit operation in a few of the smaller pools. Wildcatting was curtailed to some extent, and competing operators showed more of a tendency to cooperate with one another in an effort to avoid drilling wastes.

Russian Competition Arises

American refiners during the early part of 1927 awoke to the realization that their supremacy in foreign markets was to be seriously challenged by Russian oil interests. Competition from this source made itself apparent in kerosene and gasoline markets on the Continent during the year, resulting in serious inroads being made into the business of some American oil interests abroad. In several instances American companies effected working agreements with the Russian oil trust whereby stipulated quantities of Russian petroleum products will be marketed abroad by the American concerns involved. These agreements for a time threatened to embroil the petroleum industry in a world-wide price war as a result of resentment on the part of the leading Dutch petroleum interests, who have strong British affiliations, over the action of the American companies in dealing with the Russians. The resentment was aroused primarily by the fact that the Dutch and British interests in question had their extensive petroleum holdings in Russia confiscated by the Soviet a number of years ago, and have since been unsuccessful in getting any compensation therefor. The situation is still far from clarified, with a strong possibility still of retaliatory action on the part of the Dutch and British interests involved in the controversy, some reports having it that the fight would be carried right to American markets by subsidiaries of the foreign companies.

With foreign demand for American petroleum products curtailed to a slight extent by competition of Russian and South American oil, domestic oil interests are turning their attention to the development of wider markets for petroleum products in the United States. Many of the leading companies in the industry have been conducting extensive advertising campaigns designed to increase the consumption of furnace oil, and have met with a fair degree of success in these efforts.

Gasoline consumption in the United States during 1927 has been estimated by the American Petroleum Institute at 298,000,000 barrels, as contrasted with 262,000,000 barrels in 1926. Exports, on the same authority, approximated 45,000,000 barrels, as compared with 44,000,000 barrels in the preceding year, an indicated increase in total consumption of about 9 percent. While there were sporadic outbursts of "price wars" in various marketing territories throughout the year, the distributing branch of the gasoline industry showed much more stability than for a number of years past. The larger marketing groups were in most instances able to maintain their price schedules, although in some instances cutting to "meet competition" was being done. The spread of special rebate agreements, contracts, allowances, advertising allowances, etc., appeared to continue; so much so, in fact, that published tankwagon quotations in some of the larger markets were little more than nominal, often being two or three cents a gallon over the net prices which filling station operators were actually paying for their gasoline. This was particularly true in New York.

One of the most important phases of the petroleum market situation as the new year gets under way is the campaign which those in the industry describe as "the war on waste." The groundwork for this campaign was completed last year when the Marland committee of the American Petroleum Institute and Federal Oil Conservation Board and other groups representing the industry conducted research work, determining, among other things, the function of gas in the production of oil. The board of directors of the Petroleum Institute has gone on record favoring the enactment of laws preventing unnecessary waste of gas in oil production, pointing out that such prevention is of vital importance in connection with the economical production and conservation of crude oil. The resolution dealing with this subject pointed out that waste of gas is unavoidable in an oil pool where there is diversified ownership, as long as any one operator, through disregard for the rights of his neighbors, or ignorance, continues the waste of gas and refuses to co-operate with other operators in the field in conservation measures. At present the situation is being studied by a committee of nine, appointed by Secretary of the Interior Work and composed of three government representatives, three representatives designated by the petroleum industry and three delegates from the American Bar Association, with a view to recommending possible legislative steps designed to effect greater conservation of crude oil resources. In addition, representatives of leading petroleum companies are endeavoring to get the various petroleum producing states to pass measures making it lawful for operators to make agreements whereby crude petroleum production is curtailed or postponed during periods of overproduction and actual or economic waste.

All three of the leading producing States, Oklahoma, California and Texas, increased their output in 1927. Combined production of the three approximated 730,000,000 barrels, or 82 percent of the record yield for the entire country, more than offsetting smaller yields from some of the other producing States. An interesting result of the Seminole development was the restoration of Oklahoma in the leading position as a producing State, displacing California for the first time in several years. Heavy development in West Texas came too late in the year for that State to pass California in ranking, but with total output for Texas only 14,000,000 barrels under that for California, it was predicted in trade circles that Texas would rank at least second by the close of 1928. Texas was approximately 58,000,000 barrels behind California. With several new pools in California practically "shut in," however, that State is capable of immediately jumping its production materially should market conditions justify such action. Thus far, however, California operators have shown no tendency to join in the race to get oil above ground.

Petroleum Market Trend

Prices for crude oil showed a consistently downward trend throughout the first three quarters of 1927, and while the general understone was still easy during the closing three months, advances in Eastern grades brought up the average prices somewhat. The average price at the close of the year, however, was 49.7 cents per barrel under that in effect at the end of 1926.

Gasoline prices at the refineries were weak during the entire year and showed a progressively downward trend, closing the year at the lowest levels for 1927. The average price for motor gasoline at the end of the year was 3.8775 cents a gallon under the

World Production of Crude Petroleum

	1927[1] Barrels of 42 U. S. gallons.	1927[1] Percent of total.	1926[2] Barrels of 42 U. S. gallons.	1926[2] Percent of total.	1857 to 1925[2] Barrels of 42 U. S. gallons.	1857 to 1925[2] Percent of total.
United States	915,000,000	72.2	770,874,000	70.3	8,669,672,000	64.36
Russia[3]	75,000,000	5.9	63,122,000	5.7	2,105,675,000	15.63
Venezuela	64,500,000	5.1	37,381,000	3.4	37,611,000	0.27
Mexico	64,200,000	5.1	90,421,000	8.3	1,316,796,000	9.78
Persia	37,000,000	2.9	35,842,000	3.3	185,657,000	1.38
Roumania	27,500,000	2.2	23,292,000	2.1	224,492,000	1.67
Dutch East Indies	20,000,000	1.6	20,817,000	1.9	315,452,000	2.34
Colombia	17,000,000	1.3	16,444,000	0.6	2,199,000	[4]...
Peru	11,000,000	0.9	10,782,000	1.0	61,573,000	0.46
British India	7,000,000	0.5	8,270,000	0.8	165,556,000	1.23
Argentina	8,500,000	0.7	7,947,000	0.7	26,757,000	0.20
Poland	5,700,000	0.4	5,844,000	0.5	196,593,000	1.46
Trinidad	5,500,000	0.4	5,278,000	0.5	27,651,000	0.21
British Borneo	5,200,000	0.4	4,942,000	0.5	20,762,000	0.15
Japan and Taiwan	1,500,000	0.1	1,557,000	0.1	51,334,000	0.38
Egypt	1,000,000		1,181,000	0.1	12,984,000	[4]...
Germany	675,000		653,000		17,280,000	0.13
France	625,000		478,000		3,226,000	[4]...
Canada	600,000		365,000		25,896,000	0.19
Ecuador	300,000		214,000		[4]...	[4]...
Czechoslovakia	140,000	0.3	150,000		638,000	[4]...
Italy	[4]...		45,000	0.2	1,256,000	[4]...
Algeria	[4]...		9,000		83,000	[4]...
Barbados	[4]...		9,000		[4]...	[4]...
Cuba	[4]...		4,000		[4]...	[4]...
England	[4]...		3,000		15,000	[4]...
Other countries	75,000		10,000		972,000	0.16
Totals	1,268,015,000	100.0	1,095,934,000	100.0	13,470,130,000	100.00

[1] Estimated by Oil, Paint and Drug Reporter.
[2] Records of United States Bureau of Mines.
[3] Includes Sakhalin.
[4] Included under "Other Countries."

average prevailing at the close of 1926.

Tankwagon gasoline prices shared in the general softness, following the trends of refinery prices. The market for tankwagon gasoline even failed to show the usual boost in prices which accompanies the summer motoring season. The height of the motoring season in 1927 staved off further market breaks but failed to effect a recovery. The average price for gasoline at filling stations at the end of 1927 was 3.68 cents a gallon under that prevailing at the close of 1926.

The trend of prices over 1927, with comparison for the corresponding dates in 1926, is illustrated by the quarterly averages which follow:—

	Average of typical markets									
	January 1—		April 1—		July 1—		October 1—		December 31—	
	1927.	1926.	1927.	1926.	1927.	1926.	1927.	1926.	1927.	1926.
Crude petroleum at wells, per barrel ..	$1.954	$1.842	$1.535	$2.048	$1.422	$2.119	$1.341	$2.084	$1.457	$1.954
Gasoline at refineries, per gallon	.109375	.11125	.0831	.115125	.08156	.12625	.0756	.114175	.0706	.109375
Gasoline at filling stations, per gallon....	.2172	.2092	.2047	.2227	.1927	.2412	.1845	.2317	.1804	.2172

Much New Financing

With many of the leading oil companies readjusting their position to meet changing conditions within the industry, there was a large volume of new financing by oil companies during 1927. This financing aggregated about $440,000,000, of which approximately $417,800,000 was in bonds and the remainder in stocks. Included in the total is $105,000,000, representing financing by subsidiaries of the Royal Dutch group, with Shell Union Oil Corporation issuing the largest individual issue of the year in the form of $50,000,000 five percent debentures. The Shell Pipe Line Corporation sold $30,000,000 of five percent debentures with Batavian Petroleum Company, another Royal Dutch subsidiary, marketing $25,000,000 of 4½ percent debentures. According to estimates in oil circles, $80,000,000 of the $105,000,000 Royal Dutch financing will be expended on properties in this country.

Other large issues of the year included $42,000,000 of 5½s by the Sinclair Crude Oil Purchasing Company; $40,000,000 of 5¼ percent debentures by the Phillips Petroleum Company; $35,000,000 of 5 percent debentures by Gulf Oil Corporation; $30,000,000 of 5s by the Marland Oil Company; $30,000,000 of 5½s by the Empire Oil and Refining Company; $18,000,000 of 5 percent notes by the Empire Gas and Fuel Corporation; $20,000,000 of 6s by the Sinclair Consolidated Oil Corporation; $15,000,000 of 5½ percent debentures by Skelly Oil Company, and $12,000,000 of 5¼ percent debentures by the Continental Oil Company.

Stock issues during the year included $5,000,000 by the Richfield Oil Company of California; $5,000,000 by the Pure Oil Company; $4,200,000 by Independent Oil and Gas Company; $4,500,000 by Sun Oil Company; $1,500,000 by Warner-Quinlan Company; $700,000 by Bolivian Petroleum Corporation, and $587,000 by the Carib Syndicate.

Pipelines Busy

Heavy production and consumption of crude petroleum during 1927 bettered the position of most of the pipeline companies considerably. In most cases, these companies increased deliveries over 1926 totals, and with transportation rates unchanged, naturally showed larger earnings. Of the 11 pipelines comprising the so-called "Standard Oil" group, seven reported larger deliveries, and four lower shipments than 1926. During the first 11 months of the year, the group as a whole delivered 167,497,512 barrels of crude, as compared with 152,375,635 barrels in the corresponding period in 1926. Deliveries by the various companies in the group for the first 11 months of 1927, with comparison for the previous year, follow:—

	Barrels	
	1927.	1926.
Buckeye Pipeline	28,967,954	26,408,857
Cumberland	2,886,999	3,053,060
Eureka	9,365,300	8,281,128
Illinois	10,584,486	11,129,544
Indiana	24,682,209	23,116,939
National Transit.....	9,004,384	8,331,501
New York Transit....	2,619,675	6,029,494
Northern	5,129,824	8,621,155
Prairie	59,181,091	46,356,619
Southern	3,148,367	1,655,636
Southwest Penna.....	11,927,223	9,389,702
Totals	167,497,512	152,373,635
Daily average.....	501,489	456,208

Several of the pipeline companies paid special dividends during 1927.

During recent years the pipeline companies' business has been unfavorably affected by the heavy movement of oil to Atlantic seaboard by tank steamers. The large surplus of tankers on hand at the close of the war were put into the Mexican and Californian service. The resulting low freight rates developed the building of additional pipeline facilities from Mid-continent fields to the Gulf Coast, from whence tankers were used to bring the oil to the North Atlantic, resulting in a corresponding decline in the volume of oil handled by the pipelines. During the first half of 1927, particularly the first four months of the year, tank steamer tonnage was closely booked up, and as production of oil was on the increase producers found it necessary to utilize the pipelines in larger measure. Following a sharp break in tanker charter rates in late summer, business of the pipelines again fell off, and was further affected at the close of the year by reduced production at Seminole.

Crude Petroleum

Domestic production of crude oil established a new high record in 1927, the commercial yield being estimated by the Oil, Paint and Drug Reporter at 907,750,000 barrels. This was an increase of approximately 19.25 percent over the output of 761,151,000 barrels similarly estimated for the previous year, and constituted a new high record. The estimated 1927 total indicates a gross production (including oil consumed as fuel at wells) of 915,000,000 barrels, compared with 769,000,000 barrels in 1926. Production in the closing week of the year averaged 2,415,800 barrels daily, against 2,374,100 barrels daily in the corresponding week in 1926 and 2,361,500 barrels daily at the beginning of 1927. The high record for the year, according to estimates of the Oil, Paint and Drug Reporter, was 2,564,400 barrels daily during the week ended August 6.

The Seminole area of Oklahoma, consisting of five separate producing pools, was the outstanding factor in the record yield of crude, producing 134,000,000 barrels of high gravity oil, approximately 15 percent of the country's total. West Texas was the second in importance, three huge pools, constituting virgin territory, being brought in during the year. Total production for the West Texas area for the year was about 55,000,000 barrels, 40,000,000 barrels over the output for the same territory in 1926.

California production was well stabilized, averaging over 600,000 barrels per day for the year. Production in the state at one time touched 670,000 barrels, at a time when intensive development of the Seal Beach and Ventura Avenue fields was in progress.

Lower prices for crude oil tended to restrict wildcatting to a considerable extent, and production of many of the older pools showed a normal recession.

Imported crude oil was an important factor in 1927. Mexican shipments to the United States fell off sharply, and were the smallest for many years past. Unfavorable legislation affecting the oil companies, together with the overproduction of domestic crude and the stoppage of shipments from Panuco for a time due to severe floods, all combined to hold down the movement of Mexican petroleum to the United States.

South America, however, more than offset the drop in Mexican shipments, and displaced Mexico as a ranking oil producer. Crude oil production in Venezuela for 1927 was estimated at 63,000,000 barrels, as compared with 36,926,000 barrels in 1926, 20,409,000 barrels in 1925, 9,155,000 barrels in 1924, and 4,757,000 barrels in 1923. Shipments of Venezuela crude for the first 11 months of the year aggregated 48,471,783 barrels, against 30,038,514 barrels in the corresponding period in 1926.

With additional tankers scheduled for completion and placing in service this year, it is believed in oil trade circles that gross production in Venezuela will reach the 100,000,000 barrel mark during 1928. There are four major pools in Venezuela, Ambrosio, La Rosa, Bene Grande and Lagunillas. None of the fields have as yet been completely defined, lack of transportation facilities having retarded development work. Should market conditions justify the expenditure, it is believed in oil trade circles that output in Venezuela could be doubled in a year's time. One prominent company, commenting on the development in Venezuela, says: "With practically all of the major pools yet to be defined, but with large areas already proven up, Venezuela for many years to come may be expected to produce daily an amount greater than its average for 1927. With facilities available for transporting the oil out of the lake, it requires no great stretch of imagination to believe that the present developed areas could produce 500,000 barrels per day. May not the significance of this development fail of recognition by the illusion of distance? May it not, in our minds, sold somewhat the same hazy position as production in Persia, or the Dutch East Indies? If we had a new field near the Gulf Coast doing a quarter of a million barrels a day and capable of producing twice that, its importance would be realized by every producer. By tanker, these Venezuelan wells are nearer to New York than any of the present coastal pools."

Production of crude was also showing some increase in Colombia, Trinidad, Peru, and Ecuador.

Refinery Products

Based on statistics compiled by the Department of Commerce covering the first eleven months of 1927, the total production of gasoline for the year amounted to about 329,623,000 barrels, while domestic demand plus exports totaled about 343,292,000 barrels, or 14,418,264,000 gallons. Thus, with demand running considerably ahead of production, stocks on hand at the close of the year were materially under holdings at the close of 1926. This was the first year since 1928 that demand had outstripped production, stocks on hand at the end of each of the nine years, 1917-1925, inclusive, having been larger than at the start of the year, while holdings at the close of 1926 were about the same as at the start of the year. The increase in gasoline demand from 1918 to date has been as follows:—

	Percent
1918	21.7
1919	3.2
1920	28.5
1921	3.2
1922	17.7
1923	26.6
1924	19.1
1925	18.8
1926	17.0
1927	*15.4

* O. P. & D. R. estimate.

With crude oil prices at relatively low levels during the entire year there was a continued tendency toward overproduction of refinery products during 1927. This was naturally accompanied by much price cutting when refiners found it necessary to cut down some of their surplus stocks, and made for a buyers' market on practically the entire list during the greater part of the year.

Domestic distributors in many instances cut down their forward buying operations to a considerable extent during 1927, and the market felt to the full the lack of speculative activity which usually tended to buoy the market during periods of temporary overproduction in previous years.

Gasoline Tankwagon Markets

While 1927 witnessed considerable improvement in tankwagon gasoline business conditions, there was still much irregularity noted in certain sections of the country.

New York, and in fact, the entire New England territory, was a hotbed of competition for the business of the filling stations. A number of the larger marketing organizations spread out, in several instances encroaching upon territory which had formerly been considered sacred to other marketing groups.

Most of the larger petroleum organizations were lining up their filling station customers in New York and nearby territory on special contracts, whereby various concessions were extended the buyers so that the net prices which they paid for their gasoline were substantially under the published tankwagon quotations, two to three cents per gallon on the average. In addition a number of the smaller marketing groups with their own chains of stations increased their gallonage heavily during the year. It was no unusual sight to see advertised brands of gasoline selling at retail at one or two cents a gallon under the published tankwagon price, while the retail market for "outside" brands of gasoline was at times as much as five cents a gallon under the published wholesale quotation of leading sellers.

Marketers operating in the Central West appeared to have the situation well in hand during the greater part of the year. Numerous price wars broke out, but they were generally quite localized and of comparatively short duration.

Tankwagon gasoline prices, on the whole, showed considerable more stability throughout 1927 than was the case with the wholesale markets.

Gasoline and Naphtha

Prices showed extremely wide ranges during 1927, the market closing December at the lowest point for the year in most instances. Heavy production of gasoline more than offset the increase in consumption during the greater part of the year, and it was a buyers' market in most respects. Cheap crude oil made for a low selling price throughout the year, sharp selling competition frequently accentuating the downward trend. Gasoline prices at Pennsylvania refineries ranged all the way from 7¾c. to 11¾c. per gallon for 54 gravity motor fuel during the year. Motor gasoline at Oklahoma refineries ranged all the way from 5⅞c. to 9⅜c. per gallon during the year, the range at North Texas refineries being 5⅞c. to 9½c. per gallon.

Details of supply, demand and stocks in the first eleven months of the past year, as gathered by the Bureau of Mines, follow:—

	Barrels		
	Production.	Stocks end of period.	Domestic demand.
January	27,960,000	46,058,000	17,888,000
February ...	25,024,000	49,714,000	18,240,000
March	27,886,000	52,410,000	22,464,000
April	26,577,000	52,379,000	23,371,000
May	26,787,000	48,609,000	26,579,000
June	26,616,000	43,768,000	27,799,000
July	28,118,000	39,089,000	29,784,000
August	28,010,000	33,455,000	29,779,000
September ...	27,716,000	29,738,000	28,409,000
October	28,903,000	29,550,000	25,497,000
November ...	28,558,000	30,401,000	24,400,000

Kerosene

A consistent downward trend prevailed throughout the year. Further expansion in export sales was halted to a considerable extent by competition of Russian burning oil, while disturbed conditions in China, one of the best foreign markets for American kerosene, also tended to cut down consumption. Pennsylvania prices for the year showed a range of 5c. to 8⅝c. per gallon for 45 water white and 6⅞c. to 9⅝c. per gallon for 47 water white. Oklahoma kerosene, 41-43 water white, ranged 3⅞c. to 6¼c. per gallon, the same grade at North Texas refineries showing a wide spread at 3¾c. to 6½c. per gallon for the year. On the average, kerosene prices averaged approximately 50 percent under 1926 price levels.

Details of production, demand and stocks for the first eleven months of the past year, as gathered by the Bureau of Mines, follow:—

	Barrels		
	Production.	Stocks end of period.	Domestic demand.
January	5,113,000	8,190,000	3,882,000
February	4,453,000	8,655,000	2,590,000
March	4,802,000	8,753,000	3,356,000
April.....	4,608,000	8,725,000	2,776,000
May	4,663,000	8,568,000	3,188,000
June	4,308,000	8,567,000	2,695,000
July	4,484,000	9,038,000	2,637,000
August	4,420,000	8,373,000	3,389,000
September	4,686,000	8,120,000	3,280,000
October	4,884,000	7,325,000	3,469,000
November	4,824,000	7,841,000	2,514,000

Fuel and Gas Oils

Fuel oil prices were fairly well sustained over the first quarter of the year, and just started its break towards the close of the first half. The decline, when it materialized, was rapid, and carried prices down to the point where they showed substantial losses from the high of the year. For example, 22-26 Oklahoma fuel oil, which sold up to $1.25 a barrel in January, had dropped to 72½c. by the close of the year, and 24-26 fuel oil, which sold up to $1.60 a barrel at North Texas refineries during the first three months of 1927, was down to 77½c. a barrel in December. Heavier competition of California, West Texas and South American fuel oil was an important market factor. Gas oil was largely a buyers' market during the closing half of the year, but the situation was by no means as unfavorable from the refiners' standpoint as was the case with fuel oil.

Details of production and stocks for the first eleven months of the past year, as gathered by the Bureau of Mines, follow:—

	Barrels	
	Production.	Stocks end of month.
January	32,936,000	*23,195,000
February	30,185,000	*22,099,000
March	32,377,000	*22,561,000
April	31,856,000	*23,732,000
May	33,499,000	*26,059,000
June	31,691,000	*26,590,000
July	33,693,000	*28,890,000
August	34,098,000	†122,311,000
September	32,339,000	†123,817,000
October	34,045,000	†125,049,000
November	32,594,000	†126,192,000

* These stocks for east of California only.
† East of California, plus California heavy.

Paraffin Waxes

Considerable speculative activity in wax was in evidence during the first quarter of the year, during which time the market was in steady to strong position. Prices broke sharply in May, but the lower levels brought out considerable additional buying, and the market recovered some of its lost ground, although never reacting upward to the levels in effect during the first three months. Export sales and domestic consumption showed substantial gains during the year, and stocks on hand at the close of 1927 were substantially under holdings at the start of the year.

Details of production, demand and stocks for the first eleven months of the past year, as gathered by the Bureau of Mines, follow:—

	Pounds		
	Production.	Stocks end of month.	Domestic demand.
January	54,114,000	192,835,000	17,842,000
February	47,363,000	198,452,000	20,171,000
March	53,644,000	201,340,000	23,461,000
April	48,917,000	211,019,000	15,322,000
May	46,267,000	207,329,000	25,458,000
June	44,938,000	198,808,000	29,459,000
July	47,979,000	191,501,000	32,105,000
August	41,576,000	180,645,000	20,859,000
September ...	47,888,000	170,172,000	20,601,000
October	49,476,000	170,367,000	21,896,000
November ...	48,146,000	171,700,000	17,404,000

Lubricating Oils

Prices for lubricating oils, on the whole, showed more stability throughout the year than was the case with other refinery products. The market was in strong position during the first quarter, and during the summer months, with motoring at its height, prices for Pennsylvania grades reached their peak for the year. There was a gradual decline in prices over the fall months. The market for Southwestern neutral oils, particularly South Texas grades, displayed easiness throughout the year, prices closing the year at levels substantially under those in effect at the start of 1927. In the industrial lubricating oil division of the market there was a broad outlet throughout the year, with compounded grades in particular coming in for a good call from the textile industry.

Details of production, demand and stocks for the first eleven months of

the past year, as gathered by the Bureau of Mines, follow:—

	Barrels		
	Production.	Stocks end of month.	Domestic demand.
January	2,570,000	7,867,000	1,496,000
February	2,345,000	8,361,000	1,231,000
March	2,754,000	8,035,000	2,334,000
April	2,615,000	8,176,000	1,712,000
May	2,625,000	8,011,000	1,928,000
June	2,571,000	7,628,000	2,197,000
July	2,672,000	7,496,000	1,811,000
August	2,752,000	7,491,000	2,004,000
September	2,782,000	7,447,000	1,965,000
October	2,757,000	7,584,000	1,782,000
November	2,477,000	7,524,000	1,739,000

Export Markets

Quotations on export gasoline and kerosene were materially under those for the preceding year during the greater part of 1927. The trend of prices on export business naturally followed that of the refinery markets in this country.

Foreign competition on both gasoline and kerosene was a factor during the entire year, and was responsible in part for the low prices in effect during 1927. Marketers of cased kerosene and gasoline did not feel this competition as keenly as was the case on bulk stocks.

Crude Petroleum: Price Changes, 1927, 1926

Cabel, W. Va.

	1927.	1926.
January 1	$2.10	$2.10
February 19	1.90	2.20
March 1	1.70	2.20
March 7	1.55	2.20
March 16	1.40	2.20
December 3	1.50	2.40

Corning, Ohio

	1927.	1926.
January 1	$2.25	$1.95
February 24	2.05	2.25
March 1	1.85	2.35
March 8	1.65	2.35
March 17	1.55	2.35
April 18	1.45	2.35
December 19	1.55	2.55

Lima, Ohio

	1927.	1926.
January 1	$2.21	$1.98
February 23	2.01	2.23
March 7	1.84	2.23
March 14	1.71	2.23

Pennsylvania

(Bradford oil in National Transit lines)

	1927.	1926.
January 1	$3.15	$3.65
January 14	3.40	3.65
February 23	3.25	3.90
March 7	3.15	3.65
April 13	2.90	3.65
August 4	2.65	3.40
December 3	2.75	3.40
December 19	2.80	3.40

Pennsylvania

(Other oil in National Transit Lines)

	1927.	1926.
January 1	$3.05	$3.55
January 14	3.30	3.55
February 23	3.15	3.80
March 7	3.05	3.55
April 13	2.80	3.55
August 1	2.55	3.30
December 3	2.60	3.30
December 19	2.65	3.30

Wooster, Ohio

	1927.	1926.
January 1	$2.25	$2.00
February 23	2.05	2.25
March 7	1.90	2.35
March 14	1.77	2.35
August 2	1.57	2.55

Illinois

	1927.	1926.
January 1	$2.10	$1.87
February 23	1.90	2.12
March 14	1.77	2.12

Indiana

	1927.	1926.
January 1	$1.98	$1.78
February 23	1.78	2.00
March 7	1.61	2.00
March 14	1.47	2.00

Plymouth, Ill.

	1927.	1926.
January 1	$1.63	$1.40
February 23	1.43	1.65
March 14	1.33	1.65

Princeton, Ind.

	1927.	1926.
January 1	$2.10	$1.87
February 23	1.90	2.12
March 7	1.73	2.12
March 14	1.60	2.12

Waterloo, Ind.

	1927.	1926.
January 1	$1.35	$1.00

Oklahoma-Kansas, North, East, and Central Texas

	1927.	1926.
January 1	$1.30@2.70	$1.07@2.43
February 22	1.30@2.31	1.07@3.32
March 5	1.20@1.95	1.40@3.32
March 21	1.10@1.60	1.40@3.32
April 7	1.05@1.45	1.40@3.32
April 19	.95@1.62	1.40@3.32
May 5	1.05@1.62	1.40@3.32
September 14	1.10@1.62	1.33@3.57

Ragland

	1927.	1926.
January 1	$0.95	$1.15

Somerset

	1927.	1926.
January 1	$2.20@2.35	$2.20@2.35
January 31	2.20	2.20@2.35
March 7	2.05	2.30@2.45
March 16	1.50	2.30@2.45
December 3	1.60	2.50@2.65

Gulf Coast "A"

	1927.	1926.
January 1	$1.40	$1.50
March 7	1.30	1.50
March 14	1.20	1.50

Gulf Coast "B"

	1927.	1926.
January 1	$1.40@2.20	$1.25
February 10	1.15@1.95	1.25
March 7	1.25@1.70	1.30@1.55
March 14	1.15@1.45	1.30@1.55

California

(Signal Hill, Huntington Beach, Inglewood, Olinda-Brea Canyon, Rosecrans, Dominguez, Torrance, and Richfield)

	1927.	1926.
January 1	$0.85@1.84	$0.85@1.64
April 1	.85@1.09	.85@1.84

California

(Whittier and La Habra)

	1927.	1926.
January 1	$0.85@1.25	$0.85@1.15
April 1	.85@ .91	.85@1.25

California

(Montebello)

	1927.	1926.
January 1	$0.85@1.25	$0.85@1.15
April 1	.85@ .91	.85@1.15

California

(Coyote Hills)

	1927.	1926.
January 1	$0.85@1.62	$0.85@1.12
April 1	.85@ .95	.85@1.70

California

(Sante Fe Springs)

	1927.	1926.
January 1	$1.02@2.44	$0.97@2.00
April 1	.85@1.15	1.02@2.44

California

(Kern River, McKittrick, and Newhall)

	1927.	1926.
January 1	$0.75@2.21	$0.75@1.80
April 1	.75	.75

California

(Midway, Sunset, Elk Hills, Lost Hills)

	1927.	1926.
January 1	$0.75@2.21	$0.75@1.80
April 1	.75@1.08	.75@2.32

California

(Wheeler Ridge)

	1927.	1926.
January 1	$0.75@1.05	$0.75@ .99
April 1	.75@ .90	.75@1.84

California

(Coalinga)

	1927.	1926.
January 1	$0.75@1.84	$0.75@1.49
April 1	.75@ .99	.75@1.84

Bellevue

	1927.	1926.
January 1	$1.40	$1.65
February 24	1.25	1.65

Bull Bayou, Caddo, Haynesville, El Dorado, Homer, Crichton and De Soto

	1927.	1926.
January 1	$1.40@2.70	$1.40@1.95
February 24	1.25@2.27	1.60@2.20
March 7	1.20@1.92	1.60@2.20
March 14	1.10@1.60	1.60@2.20

Cotton Valley

	1927.	1926.
January 1	$1.20	$1.10
February 24	1.10	1.10
March 16	1.00	1.10
December 1	.85	1.20

Smackover

(Below 24 Degrees)

	1927.	1926.
January 1	$1.10	$0.85
February 24	1.10	1.00
March 16	1.00	1.10
July 6	1.00	1.10
September 10	.90	1.10
November 19	.85	1.10

Smackover

(27 Degrees and Above)

	1927.	1926.
January 1	$1.50	$1.35
February 24	1.25	1.40
March 16	1.21	1.21@1.40
July 6	1.25	1.35@1.50
September 19	1.15	1.35@1.50
November 19	1.00	1.50

Big Muddy

	1927.	1926.
January 1	$1.85	$1.75
February 23	1.62	2.00
March 7	1.47	2.00
March 14	1.30	2.00

Cat Creek

	1927.	1926.
January 1	$2.00	$1.90
February 24	1.75	2.15
March 7	1.55	2.15
March 14	1.33	2.15

Elk Basin

	1927.	1926.
January 1	$2.00	$1.90
February 23	1.75	2.15
March 7	1.55	2.15
March 14	1.33	2.15

Greybull

	1927.	1926.
January 1	$2.15	$1.75

Hamilton Dome

	1927.	1926.
January 1	$1.35	$1.35

Kevin

	1927.	1926.
January 1	$1.20	$0.95

Lance Creek

	1927.	1926.
January 1	$2.00	$1.90
February 23	1.75	2.15
March 7	1.55	2.15
March 14	1.33	2.15

Osage

	1927.	1926.
January 1	$2.00	$1.90
February 23	1.75	2.15
March 7	1.55	2.15
March 14	1.33	2.15

Rock Creek

	1927.	1926.
January 1	$1.85	$1.75
February 23	1.62	2.00
March 7	1.42	2.00
March 14	1.30	2.00

Salt Creek

(29 Degrees to 29.9 Degrees)

	1927.	1926.
January 1	$1.55	$1.23
February 24	1.38	1.48
March 7	1.25	1.48
March 14	1.14	1.48

Salt Creek

(36 Degrees to 36.9 Degrees)

	1927.	1926.
January 1	$1.90	$1.79
February 24	1.66	2.04
March 7	1.46	2.04
March 14	1.28	2.04

Sunburst

	1927.	1926.
January 1	$1.25	$1.35

Torchlight

	1927.	1926.
January 1	$2.15	$1.75

Oil Springs, Canada

	1927.	1926.
January 1	$2.61	$2.45
February 21	2.41	2.70
March 7	2.24	2.70
March 14	2.11	2.70

Petrolia, Canada

	1927.	1926.
January 1	$2.68	$2.38
February 23	2.48	2.63
March 7	2.31	2.63
March 14	2.18	2.63

Tuxpan, Mexico

	1927.	1926.
January 1	$1.35	$1.40

Panuco, Mexico

	1927.	1926.
January 1	$1.16	$1.16

Refinery Products: Record of Prices

(Tankcar Quotations at Refinery)

Gasoline and Naphtha

Pennsylvania

54 Gravity, Naphtha

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.12	$0.11½	$0.11¾	$0.11¼
February	.11¾	.11½	.11¾	.11¼
March	.11¾	.11½	.11½	.09¾
April	.12	.11½	.09¾	.08½
May	.13½	.12¼	.09¼	.09
June	.14	.13½	.09¼	.09
July	.13¾	.12¾	.09¼	.09
August	.13	.12¾	.09	.08½
September	.13	.12¾	.08¾	.08¼
October	.13	.12¼	.08¾	.08¼
November	.12	.11½	.08	.07¾
December	.11¾	.11½	.07¾	.07¾
Year	.14	.11½	.11¾	.07¾

60 Gravity, S. R. Gasoline

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.13¾	$0.13½	$0.13¼	$0.12¾
February	.13½	.13¼	.13	.12¼
March	.13½	.13¼	.12¼	.10¾
April	.13¾	.13¼	.10½	.10
May	.14½	.13¾	.10¼	.09¾
June	.15½	.15	.10	.09¾
July	.15¼	.14½	.10	.09¾
August	.14½	.13½	.10	.09
September	.14¼	.14	.09¼	.09
October	.13¾	.13½	.09	.09
November	.13½	.12½	.08½	.08½
December	.13¼	.12½	.08½	.08½
Year	.15½	.12½	.13¼	.08½

64 Gravity, S. R. Gasoline

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.15¾	$0.15½	$0.14½	$0.13¾
February	.15¼	.15	14	.13½
March	.15¼	.14½	.13½	.11¾
April	.15	.14½	.11½	.11
May	.16	.15½	.11¼	.10½
June	.16½	.16½	.10¾	.10½
July	.16½	.13½	.10¾	.10½
August	.16	.14¾	.10¾	.09¾
September	.15	.14¾	.10¾	.09¾
October	.15	.14½	.10	.10
November	.14¾	.13½	.09¾	.09½
December	.14¾	.13¼	.09½	.09½
Year	.16½	.13¼	.14¼	.09½

Oklahoma

50@52, 450 End Point, Naphtha

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09½	$0.08¾	$0.09¼	$0.09
February	.09¾	.09¼	.09	.08¾
March	.09½	.09¾	.07¾	.06
April	.09¾	.09¾	.06¼	.06
May	.11½	.09¾	.06¼	.06
June	.11½	.11	.06¼	.06
July	.11	.10¾	.06½	.06¼
August	.11¼	.10½	.06½	.06
September	.10¾	.10¼	.06¼	.06
October	.10¾	.09½	.06	.06
November	.09½	.08¾	.06	.06
December	.09¼	.08¾	.06	.05¾
Year	.11½	.08¾	.09¼	.05¾

58@60, 437 End Point, Gasoline (U. S. Motor)

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10½	$0.09½	$0.09¾	$0.08¾
February	.10¾	.09¾	.09	.07¾
March	.10¼	.09¾	.07¾	.06
April	.10¼	.09¾	.06¾	.06½
May	.12¼	.10¼	.06¾	.06¼
June	.12½	.11¼	.06¾	.06½
July	.11½	.11	.07¼	.06¾
August	.11¾	.10¾	.07¼	.06
September	.11¼	.10½	.06¾	.06½
October	.10¼	.09¾	.06¼	.06
November	.09¾	.08¾	.06	.06
December	.09¾	.09	.06	.05¾
Year	.12½	.08¾	.09¾	.05¾

60@62, 400 End Point, Gasoline

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.11¾	$0.11	$0.10¼	$0.10
February	.12	.11½	.10	.09
March	.12	.11	.08¾	.06¾
April	.11¼	.11	.07	.06½
May	.12¾	.11¾	.07	.06¾
June	.12¼	.11¾	.07	.06¾
July	.12	.11¾	.07½	.07
August	.12	.11¼	.07¼	.06¼
September	.11½	.11	.06¾	.06¾
October	.11	.10½	.06½	.06½
November	.10¾	.10¼	.06½	.06½
December	.10¼	.10	.06½	.06¾
Year	.12¾	.10	.10¼	.06¼

North Texas

56@58, 450 End Point, Naphtha

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09¾	$0.09¼	$0.08¾	$0.08¾
February	.10	.09½	.08¾	.08
March	.10	.09¾	.07¼	.05¾
April	.09¾	.09¾	.06¼	.06
May	.12	.09¾	.06¼	.06
June	.11½	.11	.06¼	.06
July	.11¼	.10¾	.06¼	.06
August	.11	.10¾	.06¼	.06
September	.10½	.10	.06¼	.06
October	.10	.09½	.06	.06
November	.09¾	.08¾	.06	.06
December	.08¾	.08¼	.06	.05¾
Year	.12	.08¼	.08¾	.05¾

58@60, 437 End Point, Gasoline (U. S. Motor)

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.10¼	$0.09½	$0.09¼	$0.08¾
February	.10¾	.09¾	.09	.08
March	.10¾	.09¾	.07¾	.06
April	.10¾	.09¾	.06¾	.06½
May	.12¼	.10½	.06¾	.06¾
June	.12½	.11¼	.06¾	.06½
July	.11½	.11	.07¼	.06¾
August	.11¾	.10¾	.07¼	.06
September	.11¼	.10½	.06¾	.06½
October	.10¼	.09¾	.06¼	.06
November	.09¾	.08¾	.06	.06
December	.09¾	.09	.06	.05¾
Year	.12½	.08¾	.09¾	.05¾

Kerosene

Pennsylvania

45, Water White

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.08	$0.07½	$0.08¾	$0.08¼
February	.08¾	.07½	.08¾	.07¾
March	.08¾	.08¼	.07¾	.06¾
April	.08¾	.08½	.07	.06¾
May	.12½	.09¼	.07	.06¾
June	.13	.11	.07	.06½
July	.10½	.08¾	.06¾	.06¼
August	.10	.09¼	.06¾	.05
September	.10¾	.10	.06¼	.05
October	.13¼	.09¼	.06¾	.06¼
November	.09¾	.08¼	.06¾	.06¼
December	.08½	.08	.06	.05¾
Year	.13	.07½	.08¾	.05

47, Water White

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.09	$0.08¾	$0.09¾	$0.09¼
February	.10	.08¾	.09½	.08¾
March	.10	.10	.09	.08
April	.09¾	.09¾	.08¼	.08
May	.13	.11¼	.08½	.07¾
June	.14	.12	.08	.07½
July	.12	.10¼	.07¾	.07¼
August	.11½	.10¾	.07½	.07
September	.11½	.11¼	.07¾	.07
October	.11¾	.10¾	.07¾	.07
November	.10¾	.09½	.07½	.07
December	.09½	.09¼	.07	.06¾
Year	.14	.08¾	.09¾	.06¾

Oklahoma

41@43, Water White

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.05¾	$0.05	$0.06¼	$0.05¾
February	.07	.05¾	.06¼	.05¾
March	.07	.06½	.06	.04½
April	.07¼	.06½	.05	.04¼
May	.10½	.08¾	.04½	.04
June	.09¾	.07½	.04¾	.03½
July	.06	.05¾	.04	.03½
August	.09¾	.07¾	.04½	.03¾
September	.09¾	.08¾	.04¾	.04
October	.08¼	.06¾	.04¾	.04¼
November	.07	.06½	.04¾	.04½
December	.06½	.06¼	.04¾	.04¼
Year	.10½	.05	.06¾	.03¾

North Texas

41@43, Water White

	Per gallon			
	1926.		1927.	
	H.	L.	H.	L.
January	$0.06	$0.05¾	$0.06½	$0.05¾
February	.07	.05¾	.06¼	.05¾
March	.07	.06½	.06	.04½
April	.07½	.06½	.04¾	.04
May	.10½	.08	.04½	.03¾
June	.09½	.07	.04½	.03¾
July	.07	.05¾	.04	.03¾
August	.09¼	.07¾	.04	.03¾
September	.09¼	.08½	.04¼	.03¾
October	.08¼	.06¾	.04¼	.04¼
November	.06¾	.06¼	.04¾	.04½
December	.06½	.06¼	.04¾	.04¼
Year	.10½	.06¾	.06½	.03¾

Fuel and Gas Oils

Pennsylvania

36@40, Fuel Oil

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.06¾	$0.06	$0.06⅝	$0.06½
February	.06½	.06¼	.06⅝	.06¼
March	.06½	.06	.06⅝	.06¼
April	.06¼	.06	.06⅝	.05½
May	.07⅛	.06¼	.05⅞	.05
June	.07⅛	.06⅝	.05¼	.04⅝
July	.06⅝	.06¼	.04⅝	.04⅝
August	.06¾	.06½	.04⅝	.04½
September	.06⅝	.06¼	.04⅝	.04½
October	.06½	.06¼	.04⅝	.04⅝
November	.06⅜	.06⅜	.04⅝	.04⅝
December	.06⅜	.06⅜	.04⅜	.04⅜
Year	.07⅛	.06	.06⅜	.04⅝

Oklahoma

22@26, Fuel Oil

Per barrel

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.27½	$1.22½	$1.25	$1.20
February	1.25	1.20	1.22½	1.20
March	1.30	1.15	1.22¼	1.12½
April	1.37½	1.27½	1.15	.95
May	1.40	1.25	.97½	.90
June	1.35	1.22½	.90	.90
July	1.25	1.20	.90	.90
August	1.47½	1.25	.90	.82½
September	1.50	1.37½	.80	.80
October	1.35	1.30	.80	.80
November	1.35	1.22½	.80	.80
December	1.25	1.22½	.72½	.72½
Year	1.50	1.15	1.25	.72½

32@36, Gas Oil

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.03⅞	$0.03⅜	$0.04⅜	$0.04¼
February	.03⅞	.03½	.04⅜	.04¼
March	.04¼	.03⅝	.04¼	.03⅝
April	.04⅛	.04	.03⅝	.02½
May	.04⅛	.01	.03	.02⅛
June	.04⅛	.04	.03	.02⅝
July	.04⅜	.04	.02⅞	.02⅝
August	.04⅝	.04¼	.02⅞	.02⅝
September	.04½	.04¼	.02⅝	.02⅝
October	.04⅛	.04¼	.02½	.02½
November	.04¼	.04	.02½	.02⅝
December	.04⅝	.04¼	.02¼	.02¼
Year	.04½	.03⅛	.04⅜	.02¼

North Texas

24@26, Fuel Oil

Per barrel

	1926. H.	1926. L.	1927. H.	1927. L.
January	$1.55	$1.45	$1.50	$1.47½
February	1.35	1.30	1.60	1.47½
March	1.40	1.30	1.60	1.25
April	1.40	1.35	1.20	1.05
May	1.45	1.25	1.10	1.05
June	1.32½	1.25	1.10	.85
July	1.32½	1.25	.90	.85
August	1.55	1.35	.90	.80
September	1.53	1.45	.85	.80
October	1.45	1.40	.80	.80
November	1.50	1.47½	.80	.80
December	1.50	1.47½	.77½	.77½
Year	1.55	1.25	1.60	.77½

32@36, Gas Oil

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.04	$0.03⅝	$0.04¼	$0.04¼
February	.05¼	.03½	.04¼	.04
March	.04	.03⅝	.04	.03¼
April	.04	.03⅝	.03⅝	.02½
May	.04½	.03⅝	.02⅞	.02⅛
June	.04⅜	.03⅝	.02⅞	.02⅛
July	.04⅛	.04	.02½	.02⅛
August	.04½	.04¼	.02⅝	.02¼
September	.04⅝	.04¼	.02⅝	.02¼
October	.04¼	.04¼	.02½	.02½
November	.04¼	.04	.02½	.02¼
December	.04⅝	.04¼	.02¼	.02¼
Year	.05¼	.03⅝	.04⅜	.02¼

Lubricating Oils

Pennsylvania

Neutral Oil

200 Vis., No. 3 Color

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.28	$0.25½	$0.30½	$0.29½
February	.26⅞	.25½	.33	.32½
March	.27⅜	.26⅝	.32½	.31½
April	.27½	.27½	.33½	.31½
May	.29	.27½	.34	.33
June	.30	.29	.34¼	.34
July	.29½	.29	.35	.34½
August	.29¼	.28½	.35	.34
September	.29	.28½	.34½	.34¼
October	.29	.28½	.34¼	.34
November	.29	.28¼	.33¾	.32½
December	.29½	.28¼	.32½	.32½
Year	.30	.25½	.35	.29½

Cylinder Stock

600, Steam Refined

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.19	$0.18¾	$0.12	$0.11
February	.18½	.18	.12⅝	.12
March	.18½	.18	.12½	.10¾
April	.16	.16	.11	.10⅝
May	.16¼	.15¼	.11	.09
June	.16	.14½	.09½	.09
July	.15	.14¼	.09	.08¾
August	.14½	.13½	.09	.08¾
September	.13¾	.12½	.09½	.09
October	.13	.11¼	.10	.09¾
November	.11½	.11	.10	.10
December	.11½	.11	.10	.10
Year	.19	.11	.12½	.08¾

South Texas

Neutral Oil

200 Vis., No. 3 Color

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12¼	$0.12	$0.12	$0.11
February	.13	.12½	.12	.11
March	.13	.12½	.12	.11
April	.12½	.11½	.12	.10½
May	.11½	.11	.11½	.10½
June	.12½	.12	.11½	.10½
July	.12	.11½	.11	.10½
August	.12	.11¼	.11	.09
September	.12	.11½	.09½	.09
October	.12	.11	.09½	.09
November	.12	.11	.09¼	.08½
December	.12	.11	.08¼	.08½
Year	.13	.11	.12	.08½

Oklahoma

Neutral Oil

200 Vis., No. 3 Color

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.12½	$0.12	$0.11½	$0.11¼
February	.12½	.12	.11½	.11½
March	.12½	.12	.11½	.10¾
April	.12	.12	.11	.10¾
May	.12½	.12	.11	.10¾
June	.12½	.11½	.11	.10¾
July	.11½	.11½	.11	.10¾
August	.11½	.11½	.11	.10¾
September	.11½	.11½	.11	.10¾
October	.11½	.11½	.10¾	.10¾
November	.11½	.11½	.10¾	.10¾
December	.11½	.11½	.10¾	.10¾
Year	.12½	.11½	.11½	.10¾

Paraffin Wax

Pennsylvania

122@124, White, Crude, Scale

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05⅝	$0.05½	$0.04⅞	$0.04½
February	.05⅝	.05⅝	.04⅝	.04½
March	.05½	.05⅝	.04⅝	.04
April	.05⅝	.05⅝	.04	.03⅞
May	.05½	.05½	.03⅞	.02⅞
June	.05¼	.05½	.02⅞	.02⅝
July	.05⅜	.05½	.03½	.02⅞
August	.05⅜	.05½	.03½	.03
September	.05⅜	.05¼	.03½	.03⅛
October	.05¼	.05⅜	.03½	.03⅛
November	.05	.05	.03¼	.03¼
December	.05	.04⅞	.03⅛	.03⅛
Year	.05⅜	.04⅞	.04⅞	.02⅝

Oklahoma

122@124, White, Crude, Scale

Per pound

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.05⅝	$0.04⅞	$0.04¼	$0.04⅛
February	.05	.04⅞	.04¼	.04¼
March	.04⅞	.04⅝	.04¼	.04
April	.03⅝	.04⅜	.04¼	.03
May	.04⅞	.04⅜	.03½	.03
June	.04⅞	.04⅜	.03½	.03
July	.04⅞	.04⅜	.03½	.03
August	.04⅞	.04⅜	.03½	.02⅞
September	.04⅜	.04⅝	.03	.02⅝
October	.03⅝	.04⅝	.02⅝	.02⅝
November	.04⅜	.04⅜	.02⅝	.02⅝
December	.04¼	.04¼	.02⅝	.02⅝
Year	.05⅜	.04⅛	.04¼	.02⅝

Export Quotations

North Atlantic Ports

Gasoline and Naphtha

Navy Gasoline, Bulk

(58-60 deg., 437 endpoint)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1200	$0.1175	$0.12¼	$0.11¾
February	.1300	.1200	.11¾	.11¾
March	.1250	.1250	.11¼	.10¼
April	.1300	.1300	.10	.09¾
May	.1450	.1300	.09½	.09
June	.1450	.1375	.09¾	.09½
July	.1350	.1300	.09¾	.09¼
August	.1325	.1300	.09¼	.09
September	.1300	.1275	.09	.09
October	.1225	.1150	.09	.08½
November	.1175	.1175	.08¼	.08¼
December	.1225	.1175	.08½	.08¼
Year	.1450	.1150	.12¼	.08¼

Navy Gasoline, Cases

(58-60 deg., 437 endpoint)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.2715	$0.2715	$0.2790	$0.2740
February	.2815	.2715	.2740	.2665
March	.2815	.2790	.2665	.2440
April	.2840	.2790	.2440	.2440
May	.2940	.2890	.2440	.2390
June	.2940	.2940	.2440	.2440
July	.2940	.2890	.2440	.2440
August	.2890	.2890	.2440	.2440
September	.2890	.2890	.2440	.2440
October	.2840	.2740	.2440	.2390
November	.2715	.2715	.2390	.2390
December	.2790	.2715	.2390	.2390
Year	.2940	.2715	.2790	.2390

Naphtha, Bulk

(61-63 degrees)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1400	$0.1400	$0.13¼	$0.12¾
February	.1500	.1400	.12¾	.12¾
March	.1475	.1475	.12¼	.11¼
April	.1500	.1475	.11	.10⅝
May	.1575	.1500	.10½	.09¾
June	.1575	.1500	.10½	.10¼
July	.1450	.1400	.10½	.10
August	.1425	.1400	.10	.09¾
September	.1525	.1450	.09¾	.09¾
October	.1325	.1250	.09¾	.09¼
November	.1275	.1250	.09	.09
December	.1325	.1250	.09¼	.09
Year	.1575	.1250	.13¼	.09

Naphtha, Bulk

64-66 degrees)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1600	$0.1575	$0.14¼	$0.13¾
February	.1700	.1600	.14	.13¾
March	.1600	.1600	.13¼	.12¼
April	.1625	.1600	.12	.11¾
May	.1700	.1650	.11	.10½
June	.1700	.1625	.11¼	.11
July	.1600	.1525	.11¼	.10¾
August	.1550	.1525	.10¾	.10½
September	.1525	.1450	.10½	.10½
October	.1425	.1350	.10½	.10
November	.1375	.1350	.09½	.09½
December	.1425	.1375	.09¾	.09½
Year	.1700	.1350	.14¼	.09½

Naphtha, Bulk

(66-68 degrees)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1850	$0.1825	$0.17	$0.16¼
February	.1950	.1850	.16¼	.16
March	.1925	.1875	.15½	.14¼
April	.1900	.1800	.14	.13⅜
May	.1950	.1900	.14	.13½
June	.1950	.1900	.14¼	.14
July	.1850	.1800	.14¼	.13⅜
August	.1825	.1800	.13⅜	.13½
September	.1800	.1700	.13½	.13½
October	.1700	.1600	.13½	.13
November	.1625	.1625	.12½	.12½
December	.1700	.1625	.12⅜	.12½
Year	.1950	.1600	.17	.12½

Kerosene

Standard White, Bulk

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0750	$0.0750	$0.09	$0.08½
February	.0800	.0750	.08½	.08½
March	.0825	.0825	.08¼	.07¼
April	.0800	.0800	.07	.06⅝
May	.0875	.0825	.06¼	.06¼
June	.0900	.0875	.06¼	.06¼
July	.0875	.0850	.06¼	.06¼
August	.0950	.0950	.06¼	.06¼
September	.0950	.0950	.06¼	.06¼
October	.0925	.0875	.07¼	.07¼
November	.0900	.0875	.07	.07
December	.0900	.0900	.07	.07
Year	.0950	.0750	.09	.06¼

Standard White, Cases

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1790	$0.1790	$0.1915	$0.1865
February	.1840	.1790	.1865	.1865
March	.1840	.1840	.1865	.1715
April	.1815	.1815	.1715	.1665
May	.1915	.1865	.1615	.1615
June	.1915	.1915	.1615	.1615
July	.1915	.1890	.1615	.1615
August	.1965	.1915	.1615	.1615
September	.1965	.1965	.1615	.1615
October	.1965	.1915	.1715	.1715
November	.1915	.1915	.1715	.1715
December	.1915	.1915	.1715	.1715
Year	.1965	.1790	.1915	.1615

Water White, Bulk

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0900	$0.0900	$0.10½	$0.10
February	.0950	.0900	.10	.10
March	.0975	.0975	.09¾	.08½
April	.0925	.0925	.08	.07⅝
May	.1000	.0950	.07¼	.07¼
June	.1050	.1000	.07¼	.07¼
July	.1025	.1000	.07¼	.07¼
August	.1075	.1050	.07¼	.07¼
September	.1075	.1075	.07¾	.07¼
October	.1050	.1000	.08¼	.08¼
November	.1050	.1000	.08	.08
December	.1050	.1050	.08	.08
Year	.1075	.0900	.10½	.07¼

Water White, Cases

Per barrel

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1940	$0.1940	$0.2065	$0.2015
February	.1990	.1940	.2015	.2015
March	.1990	.1990	.2015	.1815
April	.1940	.1940	.1815	.1765
May	.2040	.1990	.1715	.1715
June	.2040	.2040	.1715	.1715
July	.2040	.2015	.1715	.1715
August	.2115	.2065	.1715	.1715
September	.2115	.2115	.1765	.1715
October	.2115	.2065	.1815	.1815
November	.2065	.2065	.1815	.1815
December	.2065	.2065	.1815	.1815
Year	.2115	.1940	.2065	.1715

Gulf Ports

Gasoline and Naphtha

Navy Gasoline, Bulk

(58-60 deg., 437 endpoint)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1125	$0.1100	$0.11¼	$0.10½
February	.1225	.1125	.10½	.10
March	.1150	.1125	.09⅝	.08
April	.1150	.1125	.08	.07½
May	.1300	.1200	.07½	.07
June	.1300	.1150	.08	.07½
July	.1250	.1200	.08	.07¼
August	.1225	.1200	.07½	.07¼
September	.1200	.1175	.07½	.07½
October	.1150	.1075	.07½	.07¼
November	.1050	.10375	.07¼	.07¼
December	.1125	.1050	.07¼	.07¼
Year	.1300	.10375	.11¼	.07

Naphtha, Bulk

(60-62 deg., 390 endpoint)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1350	$0.1325	$0.12	$0.11¾
February	.1450	.1350	.11½	.11
March	.1400	.1375	.10¼	.08¾
April	.1375	.1350	.08½	.08½
May	.1425	.1375	.08	.07½
June	.1425	.1350	.08½	.08
July	.1325	.1300	.08½	.08
August	.1325	.1300	.08	.08
September	.1300	.12875	.08	.08
October	.1250	.1175	.08	.08
November	.1150	.1125	.08	.08
December	.1200	.1125	.08	.08
Year	.1450	.1125	.12	.07½

Naphtha, Bulk

(64-66 deg., 375 endpoint)

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.1450	$0.1425	$0.13	$0.12¾
February	.1550	.1450	.12½	.11¾
March	.1500	.1450	.10⅝	.09¼
April	.1475	.1450	.09	.08⅝
May	.1525	.1475	.08½	.08
June	.1525	.1450	.09	.08½
July	.1425	.1350	.09	.08½
August	.1375	.1350	.08½	.08½
September	.1350	.13375	.08½	.08½
October	.1300	.1225	.08½	.08½
November	.1200	.1175	.08½	.08½
December	.1300	.1200	.08½	.08½
Year	.1550	.1175	.13	.08

Kerosene

Prime White, Bulk

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0700	$0.0700	$0.08	$0.07½
February	.0750	.0700	.07½	.07
March	.0775	.0750	.07	.06¼
April	.0750	.0725	.06	.05½
May	.0825	.0775	.05¼	.05¼
June	.0825	.0825	.05¼	.05¼
July	.0825	.0800	.05¼	.05¼
August	.0900	.0825	.05¼	.05¼
September	.0900	.0875	.05¾	.05¼
October	.0850	.0800	.06¼	.06¼
November	.0800	.0800	.06	.06
December	.0800	.0800	.06	.06
Year	.0900	.0700	.08	.05¼

Water White, Bulk

Per gallon

	1926. H.	1926. L.	1927. H.	1927. L.
January	$0.0850	$0.0850	$0.09½	$0.09
February	.0875	.0850	.08¾	.08½
March	.0900	.0900	.08½	.07½
April	.0950	.0850	.07	.06½
May	.0950	.0900	.06¼	.06¼
June	.0950	.0950	.06¼	.06¼
July	.0950	.0925	.06¼	.06¼
August	.1000	.0975	.06¼	.06¼
September	.1000	.1000	.06¾	.06¼
October	.1000	.0950	.07¼	.07¼
November	.0950	.0950	.07	.07
December	.0950	.0950	.07	.07
Year	.1000	.0850	.09½	.06¼

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Fertilizer Materials: Market Review

Definite indications of recovery in the position of the fertilizer industry were discernible as 1927 drew to a close, and the outlook for 1928 indicated that fertilizer interests were in for one of the best years since the collapse of the post-war boom.

Of outstanding interest in the materials market was the material progress which the Chilean nitrate of soda industry made toward stabilization, after the disastrous season in 1926-27, when serious inroads into the volume of the natural nitrate was made by various synthetic nitrates. Not only did the volume of the Chilean producers show a substantial recovery, but the industry for the first time in years was able to secure from the Chilean government the type of co-operation which it has long sought. Controlled selling was abolished during the year, resulting in an immediate up-turn in sales, and the industry in Chile succeeded in getting assurances from the government that export taxes would be lightened, and that government co-operation would be forthcoming in efforts to increase consumption of nitrate.

Chilean nitrate producers were approached by representatives of the European synthetic nitrogen industry during the year with a view toward including Chilean production in a world cartel to control production and sales of nitrate, but the South American producers were not inclined to participate in the scheme, and nothing definite has been forthcoming in this connection.

Fertilizer manufacturers succeeded in putting their businesses on a much sounder footing during 1927. Sales picked up a little, and the credit situation within the industry was immensely improved. These gains were traceable in large measure to the strong recovery in cotton prices, and it is upon the latter development that much of the optimism for 1928 is based. A number of the leading fertilizer manufacturing companies improved their financial position to a considerable extent during the year, and it appeared to be generally felt that the industry was again upon a sound footing and in favorable position to go forward.

General improvement in the farming situation during 1927 was naturally accompanied by corresponding gains in the position of the fertilizer industry. The Secretary of Agriculture, in predicting a good year for farmers and farm products in 1928, pointed out that with reasonably favorable weather conditions, he could see no reason why 1928 should not be better than 1927. General improvement in the farm situation in 1927 was contained in the secretary's report, which stressed the increased buying power of the farmers. He estimates that at the end of the year the farmers of the country were $300,000,000 better off than at the end of 1926. About $270,000,000 of the increased farm values was attributed to cotton. Grain averaged a little higher during the year, cattle did better, but hogs not so well. Farm prices at the end of 1927 averaged 37 percent higher than pre-war levels, and about 10 points higher than at the end of 1926. Looking into 1928, the secretary expects satisfactory farm prices generally. Prices in 1927 were not so high as to unduly stimulate any commodity, he pointed out, anticipating well-balanced crops. The report closed with an expression of the belief that 1928 should show a better quality of animals on the farm, a better quality of seed, more modern machinery, larger use of fertilizer, and possibly advanced yields.

The Nitrate Situation

The London point of view with respect to the situation in the fertilizer market, with particular reference to nitrate of soda, is covered comprehensively in Aikman's annual report, which follows:—

The consumption of nitrogenous fertilizers has continued to expand during the year 1927, and the large increase in production of synthetic nitrogen found a ready market during the first half of the year at the expense of Chilean nitrate, owing to the prohibitive price at which the latter was marketed. During the height of last consuming season, prices in consuming markets ranged from £12 6s. to £13 5s. for Chilean nitrate (15½ percent nitrogen), £9 17s. 6d. to £11 17s. 6d. for sulphate of ammonia (20½ percent nitrogen), and £9 to £10 per ton for nitrate of lime (15½ per cent nitrogen). A year ago it was evident that with a return to free selling by the Chilean producers a much lower level of prices would be attained, and this has proved to be the case, today's quotations for Chilean nitrate for next spring delivery ranging from £10 5s. to £11 5s. per ton in consuming markets, a fall of £2 per ton. With this prospect in sight it was thought probable that the synthetic producers would also make a similar cut in prices for the coming spring, but this has not been realized the quotations for sulphate of ammonia being about 10s. lower at £9 7s. 6d. to £11 7s. 6d. and nitrate of lime 5s. lower at £8 15s. to £9 15s. per ton. This resulted in a very active demand for Chilean nitrate, and it seems probable that the falling off in consumption of this article during the last two years will be recovered during the coming season.

The world's production of synthetic nitrogen products and by-product sulphate of ammonia for the year ending June 30, 1927, was estimated at 1,050,000 tons of nitrogen, and the consumption of Chilean nitrate during the same period was the equivalent of 270,000 tons of nitrogen. During the current year the production of the former is expected to reach 1,150,000 to 1,200,000 tons, and if the synthetic plants at present projected are completed, some authorities are of the opinion that in four years' times the production will further increase to 1,900,000 to 2,000,000 tons. Although the latter appears to be an excessive figure, the negotiations at present proceeding between the European producers for working agreements (which are understood to have been already concluded in the case of the German, Norwegian, and French producers), are indicative of a fear of overproduction in the future, and the extension of these agreements to an entente with the Chilean nitrate industry for the limitation of production would appear to be very much in the interests of the principal synthetic nitrogen producers. Their real costs of production are difficult to ascertain, but it is generally believed that in Germany (probably the cheapest producer) these approximate £6 per ton at works in the case of sulphate of ammonia or, say, £6 10s. to £7 per ton delivered to consumers in Germany and adjacent countries and 10s. to £1 higher for delivery in more distant countries, and to obtain a reasonable return on the enormous capital outlay involved in putting up new plants, it is now thought that selling prices are unlikely to be substantially reduced from the figures ruling today. The cost in other countries where plants recently erected are coming into operation vary largely, but are, in most cases, believed to be higher. This fact was demonstrated recently in the French Chamber of Deputies when, in the course of a debate, it was stated that although the big Toulouse factory for the production of synthetic nitrogen, under the Haber process, had taken 10 years to build and had cost the government over 250,000,000 francs (exclusive of the lands, building, railway sidings, etc., which were taken over at the end of the war), it was impossible to sell the products of this factory in competition with imported fertilizers except at a loss. It is also interesting to note that the largest Scandinavian producer of synthetic nitrogen has this year shown a loss on the 12 months' trading.

The great improvement seen recently in the demand for Chilean nitrate can be attributed largely to the big reduction in price, as compared with last season, but an important contributory cause is the fact that consumers, having had the opportunity in the past few seasons of comparing, by actual experience, the relative values of synthetic products and nitrate of soda, appear to be convinced that the latter is the better article, giving quicker reaction and presenting none of the disadvantages in regard to handling which is the case with some of the synthetic products on the market. If, therefore, the Chilean Government decide to reduce the duty or give other substantial help to the industry after June 30, 1928—as they have promised to do—thereby making a further reduction in price possible for the spring of 1929, it might go far to stop the fulfillment of schemes for the erection of new synthetic plants now projected, and create such an increased demand for the Chilean article that its total productive capacity would find a ready market. If the investigations that are being carried out at present as to the value of iodine in the raising of both crops and cattle prove to be favorable, the position of Chilean nitrate should be further strengthened, as iodine is a natural constituent of nitrate, and is not present in any synthetic product on the market today.

The following is a comparison of the figures for the six months ending December 31 1913, 1925, 1926 and 1927, and the nitrate years ending June 30, 1914, 1926 and 1927:—

	1913-14. Tons.	1925-26. Tons.	1926-27. Tons	1927-28. Tons.
Deliveries in Europe and Egypt for six months ending December 31	490,000	315,500	296,500	311,000
Deliveries in Europe and Egypt for twelve months ending June 30	1,984,000	992,000	917,500	.....
Deliveries in United States for six months ending December 31	258,000	418,000	206,000	305,000
Deliveries in United States for twelve months ending June 30	553,000	923,000	673,500	.....
Deliveries in other countries for six months ending December 31	45,000	85,000	96,000	111,000
Deliveries in other countries for twelve months ending June 30	92,000	177,000	162,000	.....
Shipments to Europe and Egypt for six months ending December 31	1,194,000	784,000	300,000	988,000
Shipments to Europe and Egypt for twelve months ending June 30	2,025,000	1,112,000	737,000	.....
Shipments to United States for six months ending December 31	236,000	427,000	279,000	373,000
Shipments to United States for twelve months ending June 30	547,000	928,000	614,000	.....
Shipments to other countries for six months ending December 31	46,000	96,000	102,000	120,000
Shipments to other countries for twelve months ending June 30	87,000	172,000	169,000	.....
Production in Chile for six months ending December 31	1,367,000	1,330,000	737,000	*1,024,000
Production in Chile for twelve months ending June 30	2,822,000	2,578,000	1,297,000	.....
Visible supply for Europe and Egypt at December 31	1,098,000	678,500	328,000	*807,000
Visible supply for United States at December 31	71,000	128,000	192,000	*116,500
Visible supply for other countries at December 31	18,000	35,000	25,000	*35,000
Stocks in Chile at December 31	498,000	879,000	1,274,000	*532,000
Total supply in sight at December 31	1,685,000	1,720,500	1,819,000	*1,490,500

* Estimating production in December at 225,000 tons and shipments at 210,000 tons to Europe and Egypt, 55,000 tons to the United States and 15,000 tons to other countries.

World Consumption

During the six months the total port deliveries amount to 727,000 tons, against 598,500 tons last year, or an increase of 128,500 tons. Europe shows an increase of 17,500 tons; Egypt a decrease of 3,000 tons; the United States an increase of 99,000 tons; and other countries an increase of 15,000 tons. The prospects of consumption next spring are generally regarded as very favorable and judging by the large quantities already sold in consuming markets for spring delivery a substantial increase in consumption appears probable in nearly all European countries. In the United States the satisfactory price obtainable for cotton makes it probable that cotton growers will use fertilizers more liberally than in the past, and a large increase in consumption is expected there.

European Consumption

The following are the detailed figures of Deliveries and Stocks in Europe and Egypt, in tons:—

Deliveries.	U. K.	France.	Belgium.	Holland.	Spain & Portugal.	Italy.	Scandinavia.	Egypt.	Germany & Baltic ports.	Total.
July-December, 1913.	46,000	42,000	80,000	19,000	6,000	6,000	....	29,000	262,000	490,000
July, 1913-June, 1914.	123,000	350,000	205,000	100,000	50,000	65,000	76,000	55,000	960,000	1,984,000
July-December, 1925.	33,500	40,500	30,500	19,500	37,500	7,000	4,500	111,000	31,500	315,500
July, 1925-June, 1926.	70,500	189,000	129,000	120,000	103,500	55,000	69,500	161,000	94,500	992,000
July-December, 1926.	14,000	52,500	27,000	18,500	25,500	10,000	4,500	116,000	28,500	296,500
July, 1926-June, 1927.	51,000	237,500	86,500	88,000	108,000	43,500	49,000	154,500	99,500	917,500
July-December, 1927.	26,500	31,000	15,500	15,500	35,000	7,500	1,000	113,000	66,000	311,000
Stocks—										
December 31, 1913..	42,000	107,000	97,000	13,000	3,000	8,000	....	....	196,000	376,000
December 31, 1925..	20,000	139,500	100,000	39,000	53,000	9,500	5,000	27,500	21,000	414,500
December 31, 1926..	7,000	77,000	55,500	32,000	28,000	6,500	500	13,500	15,000	235,000
December 31, 1927.	14,000	177,000	69,000	36,500	80,000	6,000	500	34,000	28,500	445,500

In France forward sales have been on a large scale and in Belgium and Holland considerably more has been sold ahead than usual, an interesting feature in these countries being the apathy of consumers toward German nitrate of lime which last year was such a formidable competitor to nitrate. In Spain, Italy, Poland and Egypt, large quantities have been arranged in anticipation of an increased consumption, and forward sales have been on a larger scale than last year. In Scandinavia, Germany and Czecho Slovakia prospects are more uncertain, and while some authorities predict an important development, others indicate little increase in consumption as compared with last year. In the United Kingdom an increase is looked for owing to the larger acreage of sugar beet. The feature has been the heavy purchases by Russia which is estimated to have already bought approximately 40,000 tons against a consumption of 2,000 tons last year, and 7,000 tons the previous year; as only high grade refined has been bought it is assumed that it is intended for the manufacture of explosives.

The cargo market has fluctuated in accordance with f.o.b., and c.i.f. quotations have ranged from £9 15s. to £10 15s. to £10 3s. 6d. to £10 6s. 0d. per ton for season shipment.

On April 14 the Producers' Association ceased to function so far as sales were concerned, and each producer since that date has been free to sell his own production for shipment after June 16, 1927. The association is, however, maintained for all other purposes, and has decided to radically change its methods of propaganda which is in future (except in the case of North and South America) to be centralized under a Director General resident in London (instead of a London Committee), who is to be assisted by local committees in the various consuming markets, and it is hoped that an increased contribution from the Chilean Government may be forthcoming and permit of a more extensive propaganda than in the past.

In order to assist the Chilean Government in estimating exports, producers now advise the association of sales made by them, and the latter issue a statement each fortnight showing total sales in which are included freight chartered by producers who consign their own nitrate to consuming markets. At December 15, the total sales were estimated at 2,500,000 tons, of which 1,730,000 tons for June/December, 1927, shipment; 655,000 tons January/April, 1928, and 115,000 tons May/June, 1928. Since that date further sales are estimated at 20,000 tons December, 1927/April, 1928, shipment, so that the total supplies arranged for consuming markets for the nitrate year July 1, 1927/June 30, 1928 (taking sales up to April shipment) are approximately 2,405,000 tons, of which it is estimated 1,130,000 tons are for Europe (including Russia), 165,000 tons Egypt, 950,000 tons Europe, 75,000 tons to Egypt, and 185,000 tons to the United States, the remaining quantities having been sold f.o.b. Chile to importers. It is not known what proportion of the quantities consigned have been sold but it is estimated that probably 150,000 tons for Europe, 20,000 tons for Egypt and 30,000 tons for the United States are still in producers' hands. As the shipments to all parts June/December amounted to 1,630,000 tons there would appear to be about 775,000 tons sold but not shipped at date for January/April shipment of which 520,000 tons for January/February and 255,000 tons for March/April shipment. As the stocks in Chile at date are only estimated at 532,000 tons the quantity still available for sale for January/February shipment would appear to be negligible, and not more than about 200,000 tons for March/April shipment, on the assumption that stocks in Chile at April 30 are unlikely to be less than two months' production.

The large sales that have taken place speak eloquently of the advantages which the industry has obtained from a return to free selling and a consequent reduction in selling prices. When free selling commenced on April 14 prices opened at 15s. 9d. for June/July and 16s. per metric quintal for July/December delivery and with an active demand quickly advanced and reached 16s. 9d. for the early position and 17s. for October/March by the end of June. With a cessation of buying prices reacted during July and touched 16s. 4½d. for spot and 16s. 8d. for October/March and remained at approximately these prices till the end of August. Active buying on the part of American importers then set in and with large transactions taking place prices steadily advanced until middle October when up to 18s. 2d. per metric quintal was paid for October/March delivery. During this period a demand also set in for forward positions, January/June changing hands at 16s. 9d. up to 17s. 7d.; April, 17s. 7d.; April/June, 16s. 1d. to 17s. 1d., and January/December, 1928, at 17s. (equal to 17s. 6d. January/June and 16s. 6d. July/December). The buying then stopped and prices steadily declined until the beginning of December when 16s. 10d. was touched for spot and 16s. 11d. per metric quintal for December/February. No transactions were reported in forward positions during this time, July/December being still quoted about 16s. 6d. Since the beginning of December an improvement has set in and closing quotations are about 17s. 3d. for January/March, with April/June and July/December nominal at about 16s. 8d. and 16s. 6d. per metric quintal respectively.

At the beginning of the year only 25 out of 151 oficinas were working, but with the improved conditions a further 40 notified their intention of reopening, of which 36 have already started and the others will be at work during the next few months. The nominal quota capacity of these oficinas (excluding Maria Elena) is about 295,000 tons and taking 75 percent as an average maximum rate of production likely to be attained the total monthly production from them appears likely to reach 220,000 tons when all are at work, plus the production of Maria Elena, which up to the present has not exceeded 21,000 tons, although 30,000 tons is looked for in a few months. On this basis the monthly production might in a few months reach 250,000 tons. It is, however, anticipated that a scarcity of labor may prevent this figure being maintained when the stocks of caliche, which in most cases had been extracted before reopening, are exhausted and oficinas are entirely dependent on the extraction of fresh caliche. The costs of production of the oficinas open or about to open (excluding Maria Elena) vary from 12s. 6d. to 15s. per metric quintal without amortization and it is generally believed that very few of those which are still closed could reopen and produce at less than 16s. per metric quintal without amortization, and in many cases even higher, so that if forward prices remain at or under 16s. 6d. any further increase in production would appear improbable. Average prices obtained by producers since June naturally vary, but in the majority of cases are probably about 16s. 6d. per metric quintal.

The failure of the Chilean Government at the last auction of nitrate grounds to obtain any offers has resulted in a decision to rent grounds in future to existing plants on a royalty basis, and one company is understood to have already contracted on this basis. The amount paid has not been disclosed but is believed to be about 1s. per metric quintal of nitrate manufactured with a guarantee on the part of the producer to manufacture a fixed quantity with a heavy fine if the figure arranged is not maintained.

Freights fluctuated between 18s. and 37s. 6d. per ton during the first half of the year and during the last half between 26s. and 31s., closing at about 28s. per ton. Some transactions have also taken place in forward liner space at 24s. to 26s. per ton for April, 1928-March, 1929, shipment. Chilean exchange has ranged between 39-37 and 39-88 pesos to the pound sterling.

During the first six months of the year sulphate of ammonia prices averaged about £11 16s. in the United Kingdom, £10 in Germany, £11 in France, £10 5s. in Belgium and £10 to £11 5s. per ton in other Continent countries. For next spring de-

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livery today's quotations are about £10 12s. 6d., £9 10s., £10 7s. 6d., £10, and £9 7s. 6d. per ton, respectively.

The production of synthetic sulphate of ammonia has remained practically stationary, efforts having been concentrated in increasing the production of the other articles, more especially nitrate of lime and ammonia sulphate-nitrate, for which there appears to be a ready sale in Germany, and the present heavy stocks are reported to have been largely sold for spring delivery. The production of combined manures including nitrogen, phosphate and potash have also been increased, and these are understood to have found a ready sale in the Far East.

Ammoniates

Recovery in the position of the soda nitrate market was the outstanding feature of the ammoniates group during 1927, although developments in synthetic ammoniates were also of considerable importance.

The return to free selling in the Chilean market made for considerable more activity and nitrate of soda staged a substantial "comeback" during the year. Consumption showed a material gain over that of the previous year, and production was speeded up to take care of the heavier buying. Carryover stocks in the hands of producers were well liquidated. Numerous oficinas, which had shut down owing to the unfavorable market during the previous season, reopened during the latter half of 1927. The plants of the large American company which started production by a new process during the year had developed their output to a commercial scale, and nitrate produced at these plants showed steady increases, although the rate of increase was perhaps not as rapid as had been generally expected. Probability of more constructive help from the Chilean government during 1928 and of reductions in export taxes, improved the statistical position of the market and heartened the Chilean producers in their fight to combat the inroads into their markets made by synthetic nitrogen.

Prices for nitrate of soda in this market were lower last year than for corresponding months in 1926 in all months except July, the lateness of the season, combined with short stocks, making for a strong market at that time. Toward the close of the year it became evident that the recovery in nitrate production and distribution had progressed at too rapid a pace to be sustained and the market slackened off somewhat, with some resale material making its appearance in American markets at prices 5 to 10 cents under importers' schedules. This resale nitrate could not be classed as distressed material, however, inasmuch as much of it had been bought at the start of the season, and even though priced as much as 10 cents a hundred pounds under importers' schedules at time of sale was still bringing from 25 to 30 cents over the level at which it could have been purchased at the start of the season in June and July. The marked recovery in the position of farmers in the cotton belt was expected to make for a heavy consumption of Chilean nitrate of soda in the South during the spring season of 1928.

Progress of Synthetics

Synthetic nitrogen made further progress during 1927 and the indications were that a heavy increase in output was in sight. Many of the developments during the year, however, were "on paper;" that is, the outstanding features were the announcements of huge plants to be erected for production of synthetic nitrogen products. Of these, one large project in the South is already under way, backed by one of the leading American chemical companies. A number of new producing units in European countries got into production during 1927, with other plants expected to start operations this year. Thus far, however, the Chilean nitrate of soda and American sulphate of ammonia producers have held their markets remarkably well in the face of the competition afforded by the synthetics.

Sulphate of ammonia prices during 1927 were materially under those for the preceding year, the schedule being scaled down by producers to meet the competition of cheaper Chilean nitrate and foreign synthetics. During the greater part of the year, domestic producers were completely sold up. A large part of the production during the latter half of 1927 was sold on contract, so that producers had relatively little stock to offer in the jobbing and export markets. The advances scored in open market prices for sulphate brought out a little resale offerings, holders in some instances preferring to take their profit rather than hold for the spring season.

Organic Materials Scarce

With curtailed slaughtering operations, both in the United States and South America, a continued dearth of animal ammoniates was evident during 1927. Makers of mixed feeds were in the market for supplies in liberal quantities throughout the year and this, combined with the general shortage, made for a sellers' market for the most part. As a result, fertilizer mixers cut down on their purchases of animal ammoniates and substituted other ingredients in their mixtures wherever possible. Quotations for dried blood on spot were materially over those for 1926, reaching a high of $5 per unit in December, against a high of $4.25 for the previous year. The low for 1927, $3.75 per unit, was 35 cents over the low figure reached during the preceding year. Hoofmeal did not appear to come in for as much buying support from feeding interests as the other animal ammoniates, the Chicago market ranging $2.85 to $3.35 per unit in 1927, against a range of $3 to $3.75 per unit during the previous year. Tankage prices, with the exception of unground at Chicago, were materially over those prevailing in 1926.

Cottonseed meal was strongly held during the greater part of 1927, reaching a high of $36 per ton, against $32 in 1926, and a low of $21.50, against $21 in the preceding year. The year showed a marked gain in the use of straight cottonseed meal for fertilizing by farmers, while manufacturers of mixtures used larger quantities of the meal in their product.

Scarcity of fish scrap was again a market factor in 1927. With the catch of menhaden small and manufacturers of poultry feeds bidding up the market, fertilizer mixers had little opportunity to cover on their season's requirements at price levels attractive from their standpoint. A good amount of business was written during the spring season on a "when and if made" basis, but the make was not as large as had been looked for, and it was reported that contract deliveries were not completed in a good many cases. The carryover from the 1926 make was cleaned up at $4.15 and 10c. per unit for the dried material in January, the market being bare of stocks until May, when the new catch appeared on the market. Business on the 1927 make opened up at $4.25 and 10c. per unit, f.o.b. fish factories, for the dried scrap, the market advancing to $4.40 and 10c. in June, $4.50 and 10c. in July, $4.75 and 10c. in August, $5.25 and 10c. in September, $5.60 and 10c. in October and November, and touching a peak of $6.00 and 10c. in December, reacting to $5.90 and 10c. at the close of the year.

Wet acid scrap did not register the same advances as the dried material, the range for 1927 being the same as that of the preceding year, $3.00 and 50c. per unit to $4.00 and 50c. per unit. During the greater part of the fall season, however, the market was equal to, or higher than, that for the comparable months in 1926. Very little of the wet acidulated scrap was available at resale at the year-end, with first hands reported completely sold up.

Phosphates

While prices for superphosphate during 1927 were generally below those in effect during the preceding year, it was evident toward the close of the year that the market was showing considerable more stability. For the past few years shading of quoted prices for superphosphates has been a general practice, but during the closing quarter of 1927 it was apparent that the makers were showing more of a tendency to adhere to their schedules. Stocks held by manufacturers at the close of the year were smaller than those on hand at the close of 1926.

The market for phosphate rock showed little change during the past year. Producers had booked a good volume of business, and production was scaled to take care of these orders and export contracts as well. Competition of African phosphate rock was still an important feature in foreign markets, particularly on the Continent, the product of North Africa offering sharp competition to American phosphate rock and cutting further into the volume of foreign trade on this material of American producers.

Stocks of bone materials were at no time excessive during the past year, and it was a sellers' market in all respects throughout the period. As a result, there were practically no price deviations, the market being considerably over 1926 price levels on nearly all grades. The drop in slaughtering in the packing house industry accounted for this state of affairs, while buying support extended the market by consuming industries other than fertilizer manufacturers sustained prices.

Potashes

Featuring the year was the action taken by the Department of Justice to nullify the alleged agreement between German and French producers, whereby American markets were divided between the two producers in what the department charged was violation of the anti-trust act. The case against the two producing groups is still pending. The German producers cancelled their contract with the American sales agency formerly handling its business in this country, and the French syndicate also closed up its American sales office. The business of the two syndicates was combined in a chain of American sales offices, with American headquarters in this city, and actual headquarters in Holland.

Spanish potash was coming into the American market in larger volume during the year.

Numerous reports of discoveries of American potash deposits were made during the year, but these seemed to hold out little hope of exploitation on a commercial scale, inasmuch as freight rates from the localities in which the beds were discovered were so high that the freight alone on the domestic potash would practically equal the selling price of foreign potashes in distributing markets.

Sulphur and Pyrites

A strong market for sulphur prevailed throughout the year, with producers finding a broader outlet for their product. Domestic demand was reported to be showing expansion, and export business was also along more active lines.

The pyrites market was in stronger position during 1927 than was the case during the preceding year. The industry was under control of stronger interests, and prices were strongly maintained throughout, holding at 12 cents per unit, as compared with a range of 11½ to 12 cents during the preceding year.

Fertilizer Materials: Record of Prices

Nitrogenous Materials

Nitrate of Soda

100 Ton Lots

September 23, 1874, the price was $2.12½ to $2.37½ per 100 pounds; October 18, 1881, $3.25; 1891, $2.15 to $2.20; 1901, $1.90 to $1.92½; 1911, $2.25 to $2.27½; 1913, $2.95; 1918, May, $5.50.

	Per hundredweight			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.69	$2.67	$2.63	$2.60
February	2.71	2.71	2.66	2.60
March	2.72	2.72	2.67	2.67
April	2.72	2.63	2.65	2.65
May	2.63	2.60	2.60	2.55
June	2.57½	2.50	2.75	2.60
July	2.45	2.33	2.40	2.30
August	2.36	2.34	2.25	2.25
September	2.36	2.36	2.32½	2.25
October	2.45	2.40	2.40	2.30
November	2.56	2.45	2.40	2.40
December	2.60	2.60	2.40	2.40
Year	2.72	2.33	2.75	2.25

Sulphate of Ammonia

March 5, 1873, the price was $7 per 100 pounds; October 18, 1881, $4.87½ to $5; 1891, $3 to $3.05; 1901, $2.77½ to $2.80; 1911, $3.20; 1913, $3.10; 1918, April, $7.85.

(Double bags, f.a.s., New York)

	Per hundredweight			
	1926.		1927.	
	H.	L.	H.	L.
January	$2.90	$2.90	$2.55	$2.50
February	2.90	2.90	2.55	2.55
March	2.80	2.70	2.55	2.50
April	2.70	2.60	2.50	2.45
May	2.60	2.60	2.45	2.30
June	2.60	2.55	2.30	2.30
July	2.55	2.50	2.30	2.30
August	2.50	2.50	2.30	2.30
September	2.50	2.50	2.40	2.30
October	2.50	2.50	2.45	2.40
November	2.60	2.50	2.45	2.45
December	2.60	2.50	2.45	2.45
Year	2.90	2.50	2.55	2.30

Dried Blood

December 10, 1879, the price was $2.37½ to $2.45 per unit; 1881, $3.75 to $3.85; 1891, $1.95 to $2.05; 1901, $2.30; 1911, $3.05; 1913, $2.95; March, 1920, $8.75.

(15@17 percent ammonia, f.o.b. New York)

	Per unit			
	1926.		1927.	
	H.	L.	H.	L.
January	$4.10	$4.10	$4.00	$3.75
February	4.25	4.25	4.25	4.10
March	4.20	3.85	4.50	4.25
April	3.75	3.70	4.50	4.50
May	3.60	3.40	4.50	4.25
June	3.75	3.40	4.25	4.00
July	4.00	4.00	4.50	4.00
August	4.00	4.00	4.50	4.50
September	4.00	4.00	4.65	4.50
October	4.00	3.90	4.75	4.65
November	3.90	3.85	4.90	4.75
December	3.85	3.75	5.00	5.00
Year	4.25	3.40	5.00	3.75

Cottonseed Meal

(F.o.b. Southeastern shipping points)

	Per ton			
	1926.		1927.	
	H.	L.	H.	L.
January	$30.00	$30.00	$29.00	$21.50
February	30.00	30.00	29.00	26.50
March	30.00	30.00	29.00	28.00
April	30.00	30.00	27.50	26.00
May	32.00	31.00	28.50	26.00
June	31.00	27.00	31.50	29.00
July	27.00	27.00	33.00	32.00
August	27.50	27.50	32.00	31.00
September	27.00	25.00	33.00	32.00
October	24.00	23.50	33.00	33.00
November	22.50	21.00	34.00	34.00
December	21.50	21.00	36.00	35.00
Year	32.00	21.00	36.00	21.50

Hoofmeal

July 4, 1904, the price was $2.25 to $2.30 per unit; October 18, 1911, $2.60 to $2.70; 1913, $2.95; 1920, May, $7.50.

(F.o.b. Chicago)

	Per unit			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.50	$3.50	$3.00	$2.85
February	3.35	3.35	3.00	2.85
March	3.40	3.00	3.25	3.00
April	3.50	3.00	3.25	3.25
May	3.25	3.25	3.25	3.00
June	3.75	3.25	3.15	3.00
July	3.75	3.75	3.15	3.00
August	3.75	3.50	3.15	3.00
September	3.25	3.25	3.25	3.00
October	3.25	3.20	3.25	3.25
November	3.20	3.00	3.25	3.25
December	3.00	3.00	3.35	3.25
Year	3.75	3.00	3.35	2.85

Fish Scrap, Dry

January 6, 1902, the price was $24.50 to $25 per unit; October 18, 1911, $3.25 and 10c.; 1913, $3.10 and 10c.; 1917, November, $6.67½ and 10c.

(F.o.b. factory)

	1926. Per unit		1927. Per unit	
	High.	Low.	High.	Low.
January	$4.25 & $0.10	$4.25 & $0.10	$4.15 & .10	$4.15 & .10
February	4.25 & .10	4.25 & .10	No stocks	No stocks
March	Nominal	Nominal	No stocks	No stocks
April	4.25 & .10	4.00 & .10	No stocks	No stocks
May	4.25 & .10	4.25 & .10	4.25 & .10	4.25 & .10
June	4.25 & .10	3.80 & .10	4.40 & .10	4.00 & .10
July	3.80 & .10	3.80 & .10	4.50 & .10	4.40 & .10
August	3.90 & .10	3.80 & .10	4.75 & .10	4.50 & .10
September	4.00 & .10	4.00 & .10	5.25 & .10	4.75 & .10
October	4.10 & .10	4.00 & .10	5.60 & .10	5.25 & .10
November	4.20 & .10	4.10 & .10	5.60 & .10	5.60 & .10
December	4.15 & .10	4.15 & .10	6.00 & .10	5.60 & .10
Year	4.25 & .10	3.80 & .10	6.00 & .10	4.00 & .10

Fish Scrap, Wet

January 6, 1902, the price was $13 to $13.50 per unit; October 18, 1911, $2.70 and 50c.; 1919, January, $7 and 75c.

(F.o.b. factory)

	1926. Per unit		1927. Per unit	
	High.	Low.	High.	Low.
January	$4.00 & .50	$4.00 & .50	$3.00 & .50	$3.00 & .50
February	4.00 & .50	4.00 & .50	No stocks	No stocks
March	Nominal	Nominal	No stocks	No stocks
April	3.50 & .50	3.50 & .50	No stocks	No stocks
May	3.50 & .50	3.50 & .50	3.50 & .50	3.50 & .50
June	3.50 & .50	3.50 & .50	3.50 & .50	3.50 & .50
July	3.50 & .50	3.50 & .50	3.50 & .50	3.50 & .50
August	3.50 & .50	3.50 & .50	3.50 & .50	3.50 & .50
September	3.50 & .50	3.50 & .50	3.85 & .50	3.50 & .50
October	3.00 & .50	3.00 & .50	3.85 & .50	3.85 & .50
November	3.00 & .50	3.00 & .50	4.00 & .50	4.00 & .50
December	3.00 & .50	3.00 & .50	4.00 & .50	4.00 & .50
Year	4.00 & .50	3.00 & .50	4.00 & .50	3.00 & .50

Tankage, Concentrated

September 4, 1889, the price was $2.27½ to $2.30 per unit; October 18, 1891, $1.75 to $1.80; 1901, $1.20; 1911, $2.70; 1913, $2.45; 1920, July, $7.25.

(F.o.b. Chicago)

	Per unit			
	1926.		1927.	
	H.	L.	H.	L.
January	$3.15	$3.15	$3.50	$3.50
February	3.15	3.15	3.50	3.50
March	3.00	3.00	3.50	3.50
April	3.00	3.00	3.50	3.50
May	3.00	3.00	3.50	3.50
June	3.25	3.00	3.50	3.50
July	3.50	3.25	3.50	3.50
August	3.50	3.50	4.00	3.50
September	3.50	3.50	4.00	4.00
October	3.50	3.50	4.00	4.00
November	3.50	3.50	4.00	4.00
December	3.50	3.50	3.75	3.75
Year	3.50	3.00	4.00	3.50

Tankage, Unground, 11 and 15 Percent

(F.o.b. Chicago)

	1926. Per unit		1927. Per unit	
	High.	Low.	High.	Low.
January	$3.25 & .10	$3.25 & .10	$3.75 & .10	$3.75 & .10
February	3.25 & .10	3.25 & .10	3.75 & .10	3.75 & .10
March	3.25 & .10	3.25 & .10	3.75 & .10	3.75 & .10
April	3.25 & .10	3.25 & .10	3.75 & .10	3.25 & .10
May	3.25 & .10	3.25 & .10	3.25 & .10	3.25 & .10
June	3.75 & .10	3.25 & .10	3.25 & .10	3.25 & .10
July	4.25 & .10	3.75 & .10	3.25 & .10	3.25 & .10
August	4.25 & .10	4.00 & .10	3.35 & .10	3.25 & .10
September	4.00 & .10	4.00 & .10	3.40 & .10	3.40 & .10
October	3.75 & .10	3.75 & .10	3.75 & .10	3.75 & .10
November	3.75 & .10	3.75 & .10	3.85 & .10	3.85 & .10
December	3.75 & .10	3.75 & .10	3.85 & .10	3.25 & .10
Year	4.25 & .10	3.25 & .10	3.85 & .10	3.25 & .10

Tankage, Unground, New York

	1926. Per unit High.			Low.		
January	$3.65	&	.10	$3.65	&	.10
February	3.75	&	.10	3.65	&	.10
March	3.75	&	.10	3.75	&	.10
April	3.60	&	.10	3.60	&	.10
May	3.60	&	.10	3.15	&	.10
June	3.25	&	.10	3.15	&	.10
July	3.75	&	.10	3.35	&	.10
August	3.75	&	.10	3.75	&	.10
September	3.75	&	.10	3.75	&	.10
October	3.75	&	.10	3.75	&	.10
November	3.75	&	.10	3.75	&	.10
December	3.75	&	.10	3.65	&	.10
Year	3.75	&	.10	3.15	&	.10

	1927. Per unit High.			Low.		
January	$3.65	&	.10	$3.65	&	.10
February	3.75	&	.10	3.75	&	.10
March	3.75	&	.10	3.75	&	.10
April	3.75	&	.10	3.75	&	.10
May	3.75	&	.10	3.75	&	.10
June	3.85	&	.10	3.75	&	.10
July	3.85	&	.10	3.85	&	.10
August	4.15	&	.10	3.85	&	.10
September	4.15	&	.10	4.15	&	.10
October	4.35	&	.10	4.15	&	.10
November	4.50	&	.10	4.35	&	.10
December	4.50	&	.10	4.50	&	.10
Year	4.50	&	.10	3.65	&	.10

Garbage, Tankage, f.o.b. Chicago

	1926. Per ton H.	L.	1927. H.	L.
January	$7.00	$6.50	$5.00	$5.00
February	7.00	6.50	5.00	5.00
March	6.00	4.00	5.00	5.00
April	6.00	5.00	5.00	5.00
May	6.00	5.00	5.00	5.00
June	6.00	5.00	5.00	5.00
July	6.00	5.00	5.00	5.00
August	6.00	5.00	5.00	5.00
September	6.00	5.00	5.00	5.00
October	6.00	5.00	5.00	5.00
November	6.00	5.00	5.00	5.00
December	6.00	5.00	5.00	5.00
Year	7.00	4.00	5.00	5.00

Phosphates

Superphosphate, Basis 16 Percent

January 7, 1885, the price was $12 to $15 per ton; October 18, 1891, $14.50 to $15; 1901, $9.60 to $10; 1911, $8 to $8.75; 1913, $7.20 to $8; 1920, June, $21.

(F.o.b. Baltimore)

	1926. Per ton H.	L.	1927. H.	L.
January	$10.00	$10.00	$8.50	$8.50
February	10.00	10.00	8.75	8.50
March	10.40	10.40	8.75	8.75
April	10.40	10.40	8.75	8.75
May	9.60	9.60	8.75	8.75
June	9.60	9.60	8.50	8.50
July	9.60	9.60	8.50	8.50
August	9.60	9.60	8.50	8.50
September	9.60	8.50	8.50	8.50
October	8.50	8.50	8.50	8.50
November	8.50	8.50	8.50	8.50
December	8.50	8.50	8.50	8.50
Year	10.40	8.50	8.75	8.50

Phosphate Rock, Florida Land Pebble, 68 Percent

June 8, 1881, the price (grade not specified) was $16 to $14 per ton; October 18, 1881, $9.50; 1891, $6.50 to $7.50; 1901, $7 to $7.50; 1911, $3.70 to $3.80; 1913, $3 to $3.25; 1920, July, $12.

(F.o.b. mines)

	1926. Per ton H.	L.	1927. H.	L.
January	$3.00	$2.85	$3.15	$3.00
February	3.25	3.00	3.00	3.00
March	3.25	3.25	3.00	3.00
April	3.25	3.15	3.00	3.00
May	3.25	3.15	3.00	3.00
June	3.15	3.15	3.00	3.00
July	3.15	3.15	3.00	3.00
August	3.15	3.15	3.00	3.00
September	3.15	3.15	3.00	3.00
October	3.15	3.15	3.00	3.00
November	3.15	3.15	3.00	3.00
December	3.15	3.15	3.00	3.00
Year	3.25	2.85	3.15	3.00

Bones, Raw, Ground

July 18, 1880, the price was $28 per ton; October 18, 1881, $35 to $37; 1891, $25 to $28; 1901, $20 to $21; 1911, $28.50 to $30; 1913, $28 to $30; 1920, July, $62.50.

(F.o.b. Chicago)

	1926. Per ton H.	L.	1927. H.	L.
January	$28.00	$28.00	$34.00	$34.00
February	28.00	28.00	34.00	34.00
March	28.00	22.00	34.00	34.00
April	28.00	28.00	34.00	34.00
May	28.00	28.00	34.00	34.00
June	28.00	28.00	34.00	34.00
July	28.00	28.00	34.00	34.00
August	28.00	28.00	34.00	34.00
September	34.00	30.00	34.00	34.00
October	34.00	34.00	34.00	34.00
November	34.00	34.00	34.00	34.00
December	34.00	34.00	34.00	34.00
Year	34.00	22.00	34.00	34.00

Bones, Rough, Hard

September 1, 1880, the price was $20 to $20.50 per ton; October 18, 1881, $25; 1891, $20 to $23; 1901, $19.50; 1911, $28.50 to $30; 1913, $22.50 to $24; 1920, August, $82.

(F.o.b. Chicago)

	1926. Per ton H.	L.	1927. H.	L.
January	$20.00	$20.00	$20.00	$20.00
February	20.00	20.00	20.00	20.00
March	20.00	20.00	20.00	20.00
April	20.00	20.00	20.00	20.00
May	20.00	20.00	20.00	20.00
June	20.00	20.00	20.00	20.00
July	20.00	20.00	20.00	20.00
August	20.00	20.00	20.00	20.00
September	20.00	20.00	20.00	20.00
October	20.00	20.00	20.00	20.00
November	20.00	20.00	20.00	20.00
December	20.00	20.00	20.00	20.00
Year	20.00	20.00	20.00	20.00

Bones, Soft, Steamed, Unground

July 4, 1904, the price was $18 to $19 per ton; October 18, 1911, $21.50 to $22; 1913, $21.50 to $22; 1920, September, $40.

(F.o.b. Chicago)

	1926. Per ton H.	L.	1927. H.	L.
January	$19.00	$19.00	$26.00	$26.00
February	19.00	19.00	26.00	26.00
March	22.00	19.00	26.00	26.00
April	22.00	22.00	26.00	26.00
May	22.00	22.00	26.00	26.00
June	25.00	24.00	26.00	26.00
July	25.00	25.00	26.00	26.00
August	25.00	25.00	26.00	26.00
September	25.00	24.00	26.00	26.00
October	24.00	24.00	26.00	26.00
November	24.00	23.00	26.00	26.00
December	26.00	23.00	26.00	26.00
Year	26.00	19.00	26.00	26.00

Bones, Ground, Steamed, f.o.b. Chicago

(1¼ and 60 percent)

	1926. Per ton H.	L.	1927. H.	L.
January	$22.00	$22.00	$28.00	$28.00
February	23.00	22.00	28.00	28.00
March	26.00	26.00	28.00	28.00
April	26.00	26.00	28.00	28.00
May	26.00	26.00	28.00	28.00
June	28.00	28.00	28.00	28.00
July	28.00	28.00	28.00	28.00
August	28.00	28.00	28.00	28.00
September	28.00	28.00	28.00	28.00
October	28.00	27.00	28.00	28.00
November	27.00	26.00	28.00	28.00
December	28.00	26.00	28.00	28.00
Year	28.00	22.00	28.00	28.00

Potashes

Muriate, 80 to 85 Percent, Basis 80 Percent

August 13, 1879, the price was $1.40 to $1.42 per unit; October 18, 1881, 73c. to 76c.; 1891, 74c. to 80c.; 1901, 76.25c. to 78.80c.; 1911, 85c. to 90c.; 1913, 80c.; 1918, January, $7.30.

	Per ton in bags 1926. H.	L.	1927. H.	L.
January	$34.90	$34.90	$36.40	$36.40
February	34.90	34.90	36.40	36.40
March	34.90	34.90	36.40	36.40
April	34.90	34.90	36.40	36.40
May	34.90	34.90	36.40	36.40
June	34.90	34.90	36.40	36.40
July	34.90	34.90	36.40	36.40
August	34.90	34.90	36.40	36.40
September	34.90	34.90	36.40	36.40
October	34.90	34.90	36.40	36.40
November	36.00	36.00	36.40	36.40
December	36.40	36.40	36.40	36.40
Year	36.40	34.90	36.40	36.40

Sulphate, 90 to 95 Percent, Basis 90 Percent

October 3, 1888, the price was $2.25 to $2.35 per unit; October 18, 1891, 83c.; 1901, 85c.; 1911, 94c.; 1913, 94c.; 1918, January, $8.

	1926. Per ton H.	L.	1927. H.	L.
January	$45.85	$45.85	$47.30	$47.30
February	45.85	45.85	47.30	47.30
March	45.85	45.85	47.30	47.30
April	45.85	45.85	47.30	47.30
May	45.85	45.85	47.30	47.30
June	45.85	45.85	47.30	47.30
July	45.85	45.85	47.30	47.30
August	45.85	45.85	47.30	47.30
September	45.85	45.85	47.30	47.30
October	45.85	45.85	47.30	47.30
November	46.85	46.85	47.30	47.30
December	47.30	47.30	47.30	47.30
Year	47.30	45.85	47.30	47.30

Pyrites and Sulphur

Pyrites

January 2, 1905, the price was 10c. to 11c. per unit ton; October 18, 1911, 10c. to 10½c.; 1913, 10½c. to 11c.; 1917, December, 25c.

	1926. Per unit ton H.	L.	1927. H.	L.
January	$0.11½	$0.11½	$0.12	$0.12
February	.11½	.11½	.12	.12
March	.12	.12	.13	.12
April	.12	.12	.13	.13
May	.12	.12	.13	.13
June	.12	.12	.13	.13
July	.12	.12	.13	.13
August	.12	.12	.13	.13
September	.12	.12	.13	.13
October	.12	.12	.13	.13
November	.12	.12	.13	.13
December	.12	.12	.13	.13
Year	.12	.11½	.13	.12

Sulphur

(Crude Brimstone)

(F.o.b. mines, in bulk)

	1926. Per ton H.	L.	1927. H.	L.
January	$17.00	$17.00	$18.00	$18.00
February	17.00	17.00	18.00	18.00
March	19.00	17.00	18.00	18.00
April	19.00	19.00	18.00	18.00
May	19.00	19.00	18.00	18.00
June	19.00	19.00	18.00	18.00
July	19.00	19.00	18.00	18.00
August	19.00	18.00	18.00	18.00
September	18.00	18.00	18.00	18.00
October	18.00	18.00	18.00	18.00
November	18.00	18.00	18.00	18.00
December	18.00	18.00	18.00	18.00
Year	19.00	17.00	18.00	18.00

Business Activity, Sentiment, and Progress in 1927 as a Guide to 1928

(Continued from page 18)

not exist today. The consumer has found it so easy to increase his income through speculation, which does not add to the capital income of industry as investment does, that the profitableness of productive endeavor is relegated to a secondary; if any, place in his consideration of his own condition and that of others.

The result of this condition, at least, the result which is emphasized in the adverse criticism of the extensive use of money for speculative purposes, is that it deprives business, particularly the smaller units of business and those operating in sections of the country remote from the centers of speculative activities, of an equitable share in the credit facilities of the nation. It is argued, on the letter of the Federal reserve act, that a check should be laid on borrowing on stock exchange account. Brokers' loans in the New York Federal reserve district alone increased almost a billion dollars during 1927, and the total of loans to brokers and dealers reported December 31 for the United States was $4,432,907,321, an increase of half a billion dollars over the year. Sales on the New York Stock Exchange during 1927 amounted to about 575,000,000 shares, an increase of more than 27 percent over the 1926 total. The average quotations on securities increased 20 percent in the same period. Enormously increased prices were paid for seats on stock and commodity exchanges. These data indicate the existence of a "business" of gigantic proportions, nonproductive and not contributing to production its due proportion of consuming support. The condition has served to facilitate industrial financing in certain instances. Possibly, it has been of indirect benefit in checking excessive expansion in others. But, it has so reduced the earning capacity of money as to place industry in the position of being resigned to diminishing margins of profit and increasing difficulty in collecting accounts due.

This effect of the volume of speculative operations during 1927 on collections is clearly discernible in the data obtained in the Oil, Paint and Drug Reporter's year-end survey. These data show that, although collections over the past year were at least as good as in 1926 in all but two of the major markets, they were poorer at the end of the year in seven. Reports from other lines of business, even those reasonably to be expected to be benefited by holiday buying (the jewelry business, for example), indicate that a similar condition existed rather generally.

Distributive trade, both wholesale and retail, measured well up to that in 1926 in aggregate value, despite generally lower prices. Concentration, however, was on the increase in both divisions, smaller businesses showing the effects of cheap money (for the big competitor). Sales by chain stores, particularly the "five-and-ten's," and by mail-order houses set new high records.

Foreign trade of the United States was highly satisfactory during 1927. Exports, according to the Department of Commerce, had a total value of $4,866,160,000, and gave a favorable trade balance of $681,707,000. The foreign trade balance in 1926 was a favorable one of $377,772,000. The gain during 1927 was not due to any extent to increased exports, this item adding less than $60,000,000. But, the value of imports decreased from $4,430,888,000 in 1926 to $4,184,453,000.

Foreign trade did not get, during 1927, the support which it deserves from those who have much to say and more or less to do with reference to foreign policy. It will be helpful to American industry in its imperative need for foreign materials and foreign markets when financiers and politicians learn that it is better, in loaning money to other peoples, to give preference to the countries in which it is possible to develop supplies of raw materials or demand for finished products. The prevailing idea seems to be that it is better to loan to competitors. Latin America is a much more logical selection than Europe, rather impressive dicta to the contrary notwithstanding.

Commodity prices were lower during 1927 than in 1926; although their level was not depressed so far as that of quotations on securities was elevated. The wholesale price index number of the Department of Labor was 1.1 points lower in December, 1927, than in the corresponding month of the preceding year. The Annalist index was 0.8 point higher, but averaged much lower for the year, having dropped in April to a figure about 4.5 points below the lowest in 1926. Fisher's index numbers for 1927 averaged almost 9 points lower than those for the preceding year. In comparison, the decline of 1.2 percent shown by the Oil, Paint and Drug Reporter's index number for chemicals, oils, drugs, and related articles is not discouraging. The Reporter's index numbers were lower at the end of the year for industrial chemicals, coaltar products, dyestuffs and tanstuffs, flaxseed and linseed oil, naval stores, gums and waxes, essential oils, fertilizer materials, petroleum, and paint and varnish materials. They were higher for miscellaneous oils and fats, drugs and fine chemicals, botanicals, and naval stores.

There is, apparently, a fine agreement among business leaders that 1928 will be a good year. The belief that it will be the best yet known in industry and commerce is quite generally expressed. Credit exists in ample supply if it be but properly employed. There are no accumulations of stocks of a depressing magnitude. Employment is showing improvement. Agricultural conditions are better than they were a year ago. It is for business, itself, to determine whether 1928 will be a period of good times. The bogey of "Presidential Year" did not rise four years ago. There is no reason that its slumbering be disturbed now.

Business is likely to pass to a greater extent than it passed in 1927 into the hands of big organizations. This is clearly to be expected in financial, if not in operating, control; for the trend in that direction has set in strongly. Congressmen may condemn; individualists may deplore—but business needs the strength of centralization, and it has begun to learn how to acquire it legally.

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* Indicates warehouse stock at this point

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